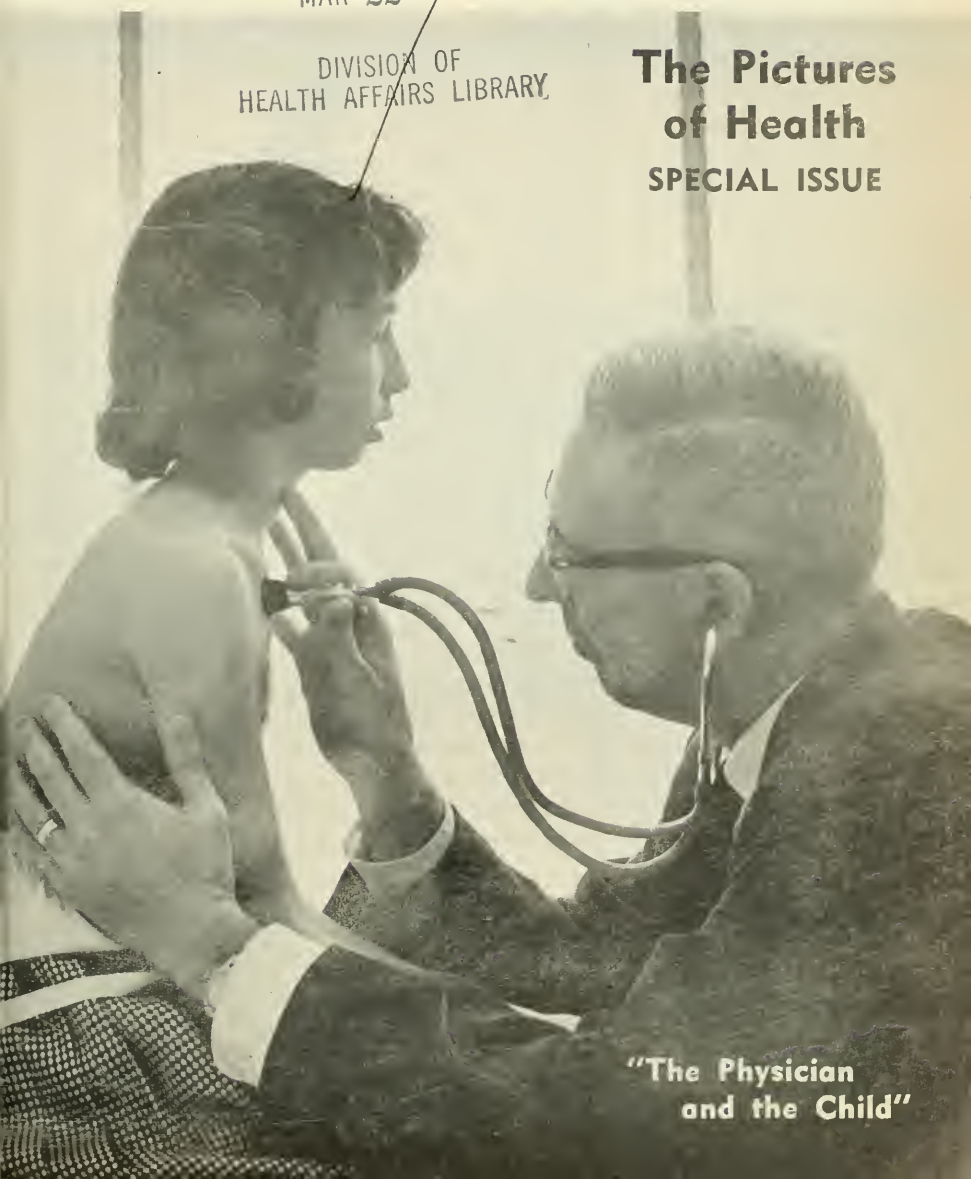
THE HEALTH BULLETIN

The Official Publication Of The North Carolina State Board of Health

The Pictures of Health

SPECIAL ISSUE

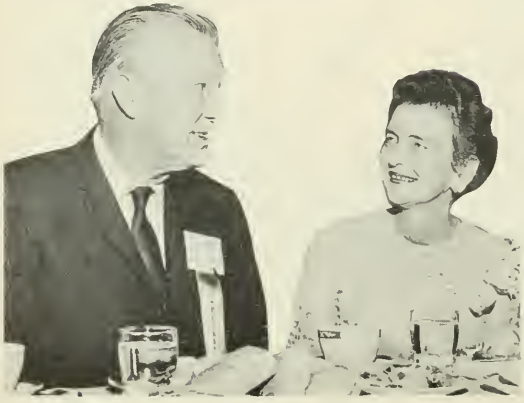


"The Physician and the Child"

Laboratory
Testing

Well
Baby
Clinics

Water
Fluoridation



Governor Dan K.
Moore and
a Local Health
Director

The State Legislative Building

Where Public Health Laws Are Enacted and Administered

The State Capitol

Don't You Envy This Public Health Nurse?

The Health Bulletin

First Published—April 1886

The official publication of the North Carolina State Board of Health, 608 Cooper Memorial Health Building, 225 North McDowell Street, Raleigh, N. C. Published monthly. Second Class Postage paid at Raleigh, N. C. Sent free upon request.

Vol. 82 January, 1967 No. 1

The

Public Health

Policy Makers

The North Carolina State Board of Health
with Governor Dan K. Moore

Mrs. Dan K. Moore Has An Interest in Public Health

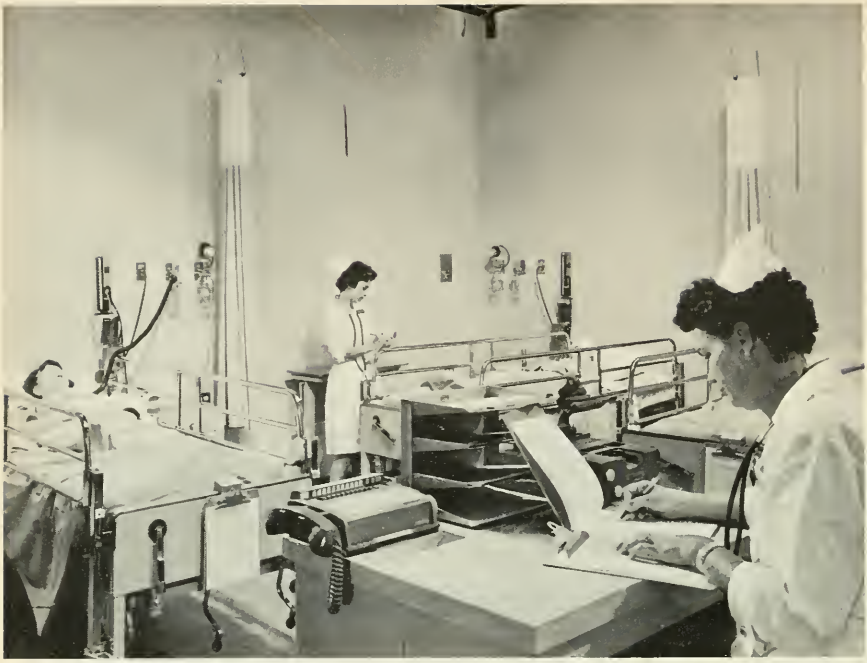
Dr. Jacob Koomen, the State Health Director, conducted North Carolina's First Lady on a tour of many activities in the Health Buildings

National Leaders of the Council on the Aging

Older People Have Many Opportunities for Service

"The Patient's Heart Has Stopped – But He Is Still Alive"

Prize Picture
Photo Courtesy
of the
B. F. Goodrich Company



Intensive Care

and

Correctional Treatment

Immunization

Prevention Is the Best Health Investment

Dental Health

The Public Health Nurse Goes Where the People Are

This Young Man Has a Weight Problem

The "Little Jack Puppet Show" Teaches Good Dental Health

National and State Public Health Leaders Confer

The Lost Colony at Manteo Invites to Constructive Recreation

Visit Our Beautiful State Legislative Building

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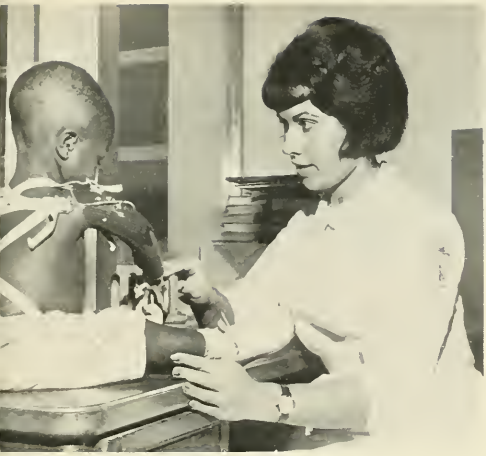

The Handicapped Can Be Helped

Starting Over with Help and Encouragement

THE HEALTH BULLETIN
P. O. Box 2091
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Public
Health
Gets
Under
Your Skin

Find YOUR
Place of Service

THE HEALTH BULLETIN

The Official Publication Of The North Carolina State Board of Health

Glue Sniffing . . .
The Quest for Ecstasy

See Page 3

Sanitarians Needed

Excellent growth opportunities for ambitious professional sanitarians.

The Engineering—Sanitation Section of A. P. H. A. has about 1,500 members and Fellows. Too few of these are sanitarians. Too few of the members are Fellows (either engineers or sanitarians).

Tomorrow's leadership wil come from those young men willing to give a small amount of time and money to advance the profession in which they practice public health.

Maintain your interest and loyalty to your particular professional association. Sanitarians associations both local and national need and deserve your full support.

You can help to further those interests through membership and active participation in the increasing environmental health functions of the Engineering-Sanitation Section of the A. P. H. A. (William V. Hickey is chairman). For a membership application write to:

Department M
American Public Health Association
1740 Broadway
New York, New York 10017

The two recent cases of typhoid fever reported from Burke County demonstrate the present epidemiology of typhoid. The patient, age 15, has lived all her life in the home of her aunt who had typhoid years ago. Positive stool cultures obtained from both the aunt and the patient were identified by serologic typing as Salmonella typhosa at the State Board of Health.

Vaccination was recommended only for immediate household contacts.

The society which scorns excellence in plumbing because plumbing is a humble activity and tolerates shoddiness in philosophy because it is an exalted activity, will have neither good plumbing nor good philosophy. Neither its pipes nor its theories will hold water. —John Gardner.

Don't Neglect Sore Throat

Sore throat is nature's warning system that something in your body is out of order.

Often a sore throat accompanies a common cold and the soreness passes in a few days with no further effect. But a sore throat also can be the symptom of a wide range of diseases, from diphtheria to leukemia, that require your doctor's skill, not your guessing, to diagnose.

Allergies can cause sore throats. Cold, dry winter air can trigger it. So can extreme thirst, excessive smoking or mouth breathing—anything that dries out the throat and cuts off secretions that normally wash dust away.

Virus infections of many types also are a cause of sore throat, and everyone who has had "flu" knows that this particular virus disease often causes the throat to hurt.

"Strep throat" is a serious infection that occasionally leads to rheumatic fever and possible heart damage. Early treatment with penicillin or other antibiotics offers an excellent chance of eliminating the potential threat of rheumatic fever.

There is little or nothing you can do to cure a sore throat at home. There are medications which bring temporary easing of the discomfort but the cure must be prescribed by your physician.

American Medical Association

Glue Sniffing . . The Quest for Ecstasy

A Georgia View

(N. C. Senate Bill 135, introduced by Ellis and others, concerns this problem.)

Glue-sniffing among teenagers, a relatively new means of enjoying quick thrills and adventure in unreality, seems to be gaining followers. Police authorities, a juvenile court judge, doctors and other health authorities were interviewed to determine the extent of this problm in Georgia and its immediate and long-range effects on the glue-sniffer. Since the problem is a recent one, much about it is unknown. The following account presents the problem and its dangers as seen by the authorities interviewed.

With only a brown paper bag and a 10¢ tube of glue a teenager is quickly caught-up in a fantastic world of vivid dreams and hallucinations. Entering this world, like entering Dante's immortal hell, can be a step "into the eternal darkness, into fire and ice." It is a world from which some never completely return.

When the teenager first inhales glue fumes, he is exhilarated, "dizzy," "drunk," free from reality. Then he begins to act drunk; his speech is slurred. He becomes depressed, mentally confused. He may display bizarre behavior. He may black out.

Feelings of reckless abandon often lead to dangerous impulsive acts. One boy in his early teens is reported to have assumed a fighting stance before an oncoming train and narrowly escaped death. Another young glue-sniffer, convinced he could fly, leapt to his death from the top of a building. Teenagers under the influence have joined in wild automobile rides in the night.

What happens to the chronic glue-sniffer? Long range effects are not easy to assess, and doctors themselves do not always agree. The concentration of the solvent in the glue, frequencey of glue-sniffing, the lapse between times of intoxication, and differences in the physiological makeup of individuals all contribute to determining the chronic results to any individual. Extensive damage to the kidneys seems to be the major effect, according to Dr. H. K. Sessions, Occupational Health Service, Georgia Health Department. "Exposure over long periods of time could also cause brain damage and blood dyscrasias with bleeding in the lungs," Dr. Sessions continued. Graver consequences—even death—result from glue-sniffing while drinking beer.

Is glue-sniffing a serious problem in Georgia? It is, according to Atlanta Police Superintendent Clinton Chafin. Superintendent Chafin reports that during the 13-month period from January 1, 1966, to January 31, 1967, 176 teenagers were arrested who had been sniffing glue. The majority of the teenagers arrested (43) were 15-year-old boys. An astonishing 39 were 12 years of age or under. Most of the arrests were made in lower income areas. Superintendent Chafin feels that the problem is increasing in the Atlanta area and that corrective measures must be taken.

Fulton County Juvenile Court Judge Elmo Holt—who comes in daily contact with many varieties of juvenile offenders—substantiates the reports of a growing problem with glue-sniffers. "We had never heard of glue-sniffers here until about three years ago," Judge Holt said. The problem first appeared

in the North and West, according to Judge Holt, and spread to this part of the country. Judge Holt also believes that the problem is primarily a low-income area problem. A survey was conducted in the Juvenile Detention Center in March, 1966. Of the 96 boys present at that time, 36 admitted having sniffed glue. Some 30 were habitual glue-sniffers. Juvenile authorities suspect that an additional 10 boys had sniffed glue but would not admit it. These figures show that almost one-half of the boys in the Center at that time were glue-sniffers!

What kind of trouble do these young people become involved in? "Every kind of trouble—burglary — robbery—shoplifting," Judge Holt says. Superintendent Chafin also reports teenagers arrested for burglary in connection with glue-sniffing.

What causes a teenager to sniff glue? Dr. Charles K. Bush, a psychiatrist and director of the Hospital Services Branch of the State Health Department's Division of Mental Health, has several theories about glue-sniffers. Dr. Bush would classify them with those who begin taking dope or smoking marijuana. "It's done for kicks. It is possible that they begin because it's the smart thing to do. A status symbol. The first thing they know, they are 'hooked.'

"Teenagers who practice glue-sniffing are insecure with their peer group or family," Dr. Bush continued. "They lack security. A youth who feels good about his relationship with his family and his peers doesn't do this sort of thing."

What can be done about this apparently growing problem? Several cities and states have passed ordinances restricting the sale of glue or making glue-sniffing illegal. Atlanta this month passed an ordinance forbidding the sale of glue to minors under eighteen years of age and restricting the retail sale of "model glue" to one medium sized container in a 24-hour period. The ordinance further stated that "it shall be unlawful for any person to intentionally smell or inhale the fumes of any type of 'model glue,' or to induce any other person to do so, for the purpose of causing a condition of, or inducing symptoms of intoxication, elation, euphoria. . . ."

Is this the answer? Can legislation prevent teenagers from trying this tempting bout with danger? Will educating teenagers to the permanent damages of glue-sniffing discourage them from trying a fad? The answers are unknown. Much about the problem itself is unknown. The need for research is evident. Only then may a light be cast on the problem.—From "Georgia's Health"

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Vol. 82 February, 1967 No. 2

The Problem of Hernia

Hernia, while not an important cause of death, is a common impairment and a leading cause of hospitalization. Thus it is a significant factor in considering problems of hospital use and health care.

Based on National Health Survey findings, it is estimated that approximately 2,900,000 people in the United States—about 15 per 1,000—have a hernia.* The condition occurs most often at the extremes of life, in infancy for congenital reason and in old age as a result of weakened body tissues. It is reported three times more frequently among males than females, reflecting the generally more strenuous activities of men as well as their great vulnerability to hernias affecting the groin. As the accompanying table shows, 23.2 per 1,000 males report a hernia compared with 7.1 for females. A distinct disparity by sex exists in every age group but is especially marked at ages 75 and older, where the prevalence of 123 per 1,000 among males is more than 6 times that for females. Hernia occurs least often in the teens and early twenties, its prevalence rising steadily thereafter.

As a cause of hospitalization among males, hernia is exceeded only by respiratory conditions, injuries, and diseases of the heart.† The average length of hospital stay for men undergoing a hernia repair or correction is about a week. Women, who account for only a fifth of the hospitalized cases, stay on the average almost three days longer. Both frequency and duration of

———

**Hernias Reported in Interviews, United States, July 1957-June 1959;* National Center for Health Statistics, Series B.—No. 25, Washington, D. C., December 1960.

†*Hospital Dischorges and Length of Stay: Short-Stay Hospitals, United States, July 1963-June 1964;* National Center for Health Statistics, Series 10—No. 30, Washington, D. C., June 1966.

HERNIA PREVALENCE AND MORTALITY IN THE UNITED STATES

Age Period (Years)	Average Prevalence Rates per 1,000 July 1957-June 1959			Average Death Rates per 100,000 1962-64		
	Total Persons	Males	Females	Total Persons	Males	Females
All Ages	14.9	23.2	7.1	1.8	1.9	1.7
Under 1	5.6	8.2	3.0	15.7	18.2	13.0
1-14				0.1	0.1	0.0
15-24	4.1	6.4	2.1	0.0	0.0	*
25-34	9.4	12.4	6.7	0.1	0.1	0.1
35-44	12.1	17.7	6.9	0.3	0.3	0.3
45-54	19.0	28.1	10.2	1.0	1.0	1.0
55-64	32.2	51.8	14.1	2.7	2.9	2.5
65-74	49.5	86.5	17.0	6.6	7.6	5.8
75 and over	64.6	122.9	19.9	20.5	24.2	17.7

*Less than 20 deaths.

Source: *Hernias Reported in Interviews, United States, July 1957-June 1959*, National Center for Health Statistics, Series B—No. 25, Washington, D.C., December 1960.

Unpublished data, National Center for Health Statistics. Published data include intestinal obstruction without mention of hernia (I.S.C. 570), which is excluded in this table.

hospitalization increase with age; almost half the discharged patients are 45 and older, with the length of stay rising from 3.3 days at ages under 15 to 9.7 at ages 45 and older.

Almost all of these hospitalizations are for surgery; indeed, hernia repairs are second only to tonsillectomies in the frequency of operations performed on males in short-stay hospitals in the United States. Surgery is the treatment of choice for most simple hernias unless contraindicated by a patient's poor general health or advanced age. The surgical risk is extremely low; a study of 1,162 hernia patients operated upon during 1950-59 reported an operative mortality of only 0.3 percent.‡ After survery, recurrences are generally experienced only by older people or those with weakened tissues.

The accompanying table shows the death rates attributed to hernia during 1962-64, by age and sex. This information was made available by the National Center for Health Statistics and is not given in published mortality reports. On the average, there were 3,451 deaths from hernia annually during this period. This figure excludes deaths from intestinal obstruction without mention of hernia (I.S.C. 570).

The hernia death rate, at all ages combined, is 1.8 per 100,000 population. Mortality is highest among infants and the elderly, and negligible at the school and early adult ages. Death rates are slightly higher for males than for females.

It is noteworthy that about 60 percent of the hernia deaths reported during this period were due to conditions specified as gangrenous, incarcerated, irreducible, strangulated or causing obstruction, indicating that hernia becomes dangerous only when treatment is unduly postponed or when other factors increase the risk of surgery.— **Statistical Bulletin, Metrolopitan Life Insurance Company.**

‡Rydell, W. B. Jr., *Inguinal and Femoral Hernias*, Archives of Surgery, Vol. 87, pp. 493-499, September 1963.

First Rabies Case in 2 Years

The first case of dog rabies in more than two years was confirmed in the State Board of Health Laboratory in February. The dog appeared on a farm about four miles west of Mt. Airy and as the farmer was attempting. to run the dog away, the dog ran into a nearby farm and attacked a calf. The dog severely bit the calf on the legs and head. Shortly after attacking the calf, the dog died. After it was determined that the dog was rabid, the calf was sacrificed and buried.

No human exposure occurred during this incident. However, this case of rabies served well as a fair warning and the activities of the rabies control program have been increased in Surry County. An additional dog warden has been employed by the county and emphasis is being placed on the vaccination of dogs and the elimination of strays.

Birth Rate Down: The U.S. birth rate during 1966 reached the lowest level since 1936, and the total number of births was the lowest since 1950, reported the U.S. Public Health Service. The 1966 birth rate was 18.5 per 1,000 population, and births totaled 3,629,000. It was the ninth consecutive yearly decline in the birth rate.

Measles: Secretary of Health, Education and Welfare John Gardner said a federally supported vaccination drive may eliminate rubeola from the United States this year. The program is underwritten by $7 million in federal grants.

A Decade of Progress In Public Health

1957-1966

Halifax County North Carolina

By Robert F. Young, M.D.
Halifax County Health Director

During the decade 1957-1966 more progress was made in public health and more new programs were initiated than during the 37 previous years of the Halifax County Health Department's existence. At least ten major programs have been developed, while the staff, including the regular employees and those on special cooperative projects, has more than doubled from 19 to 41.

Pediatric clinics were developed in 1957 in cooperation with the Halifax County Medical Society and with the Department of Pediatrics at Duke Medical Center. These clinics which now number four each month provide services to medically indigent children from birth to ten years of age, but are designed primarily for infants and preschool children.

The next big development came in 1959 when the Mental Health Program was initiated with a position for a clinical psychologist. Dr. Carl Eisdorfer from the Department of Psychiatry at Duke was the first mental health specialist to fill this position and has continued with the program through the years making an outstanding contribution. In the meantime, two additional clinical psychologists and a psychiatrist from Duke have joined Dr. Eisdorfer. In addition to these men, there are four psychology interns and three graduate students in clinical psychology from Duke who visit in this county under the supervision of Dr. Eisdorfer and the other psychologists. A comprehensive Human Relations Center (mental health) is being planned at the present time. Another very significant development in mental health has been the proposed Suicide Prevention Program which will begin operation in the near future.

Hard on the heels of this Mental Health Program came the Special Tuberculosis Control Project which has been conducted in cooperation with the United States Public Health Service, State Health Department, the local medical profession and the State Sanatorium System. The Tuberculosis Association also has aided in this program. It has been financed to the extent of approximately $85,000 by the Public Health Service since its inception. In

Continued to Page 14

An Invitation

The Western North Carolina Public Health Association especially invites you to their next annual meeting to be held in the Grove Park Inn, Asheville, North Carolina. PLEASE MARK THIS DATE ON YOUR CALENDAR. THE DATE IS MAY 18, AND 19, 1967.

We expect to have an excellent scientific session and social events which you will thoroughly enjoy. At a later date, you will receive further announcements about this meeting, giving you a preview of the program and other events.

We particularly wish to invite committees, executive committees, boards of directors, and examining boards to hold their spring meeting with us. This would combine an interesting public health meeting with business matters concerning related public health fields. If you happen to be a member of such a committee that can be invited to hold one of their regular spring sessions during or with the Western North Carolina Public Health Association, please advise me immediately. I will certainly contact the chairman or president of such a committee or board and especially invite him to hold a session of his group with the WNCPHA Meeting.

Remember—PUT THIS DATE ON YOUR CALENDAR. The air-conditioned city in the Land of the Sky is very beautiful during the month of May.

For your reservations (get them in early) write to Reservation Manager, Grove Park Inn, Asheville, North Carolina, 28801.

H. W. STEVENS, M. D., CHAIRMAN
LOCAL ARRANGEMENTS
P. O. BOX 7607
ASHEVILLE, NORTH CAROLINA
28807

Grove Park Inn Welcomes You

Any Time of Year

SOUTHERN BRANCH

AMERICAN PUBLIC HEALTH ASSOCIATION

35th Annual Meeting — 1967

Sheraton-Jefferson Hotel

May 10, 11, 12 — St. Louis, Missouri

PROGRAM

THEME: REGIONALIZATION FOR PERSONAL HEALTH SERVICES

Wednesday, May 10, 1967

FIRST GENERAL SESSION

9:30 A.M.

Presiding.....H. P. Hopkins, Ph.D., President

Invocation.....The Very Reverend William H. Mead
Dean, Christ Church Cathedral, St. Louis

Announcements and Early Business.....J. Earl Smith, M.D., Commissioner of Health, St. Louis Division of Health, and Chairman, Local Arrangements Committee

Greeting.....C. Howe Eller, M.D., Dr. P. H., Commissioner of Health, St. Louis County Health Department, and President, Missouri Public Health Association

Welcome Address.....L. M. Garner, M.D., M.P.H., Acting Director, The Division of Health of Missouri

Greetings from A.P.H.A.
Milton Terris, M.D., President
American Public Health Association

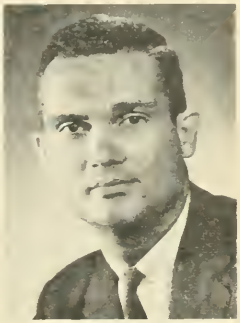
Dr. Terris

Introduction.....Robert F. Lewis, Ph.D., 1st Vice President

President's Address.....H. P. Hopkins, Ph.D., President

Introduction.....Albert V. Hardy, M.D., Director, Southern Branch, APHA, Continuing Education Project

Keynote Address:
"Planning: The Key to Regionalization"
William L. Kissick, M.D.
Director, Office of Program Planning
and Evaluation
Public Health Service
Washington, D. C.



Dr. Kissick

Governing Council Luncheon—Baroque Room.....12:15 p.m.

SECTION MEETINGS.....2:00-4:30 p.m.

President's Reception—Boulevard Room.....6:30-7:30 p.m.

Thursday, May 11, 1967

SECOND GENERAL SESSION

9:30 A.M.

Presiding.....Charles G. Jordan, B.S.C.E., Secretary-Treasurer

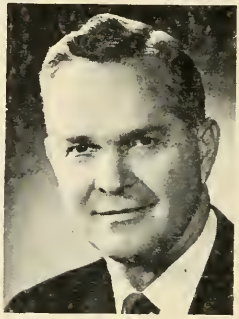
Introduction.....John S. Neill, M.D., Chairman, Program Committee

"Regionalization of Environmental Health Services"
Franklin D. Yoder, M.D., Director of Public Health, Illinois Dept. of Public Health
Springfield, Illinois

Dr. Yoder

Introduction.....Edward M. Campbell, D.D.S.
Co-Chairman, Program Committee

"Regionalizing Clinical Services for Personal Health"
Robert Q. Marston, M.D.
Associate Director, NIH, and Director, Div. of
Regional Medical Programs
National Institutes of Health
Bethesda, Maryland



Dr. Marston

SECTION MEETINGS.....2:00-4:30 p.m.
Governing Council Meeting—Baroque Room.....5:00 p.m.
Banquet and Dance—Gold Room.....7:30 p.m.

Friday, May 12, 1967

THIRD GENERAL SESSION

9:30 A.M.

Presiding.....H. P. Hopkins, Ph.D., President
APHA Correlative Business.....Berwyn F. Mattison, M.D.
Frederick W. Hering, M.S.P.H.

Business Session:
Committee Reports
Section Reports
Introduction of New Officers

Dr. Mattison

Closing remarks and adjournment.....H. P. Hopkins, Ph.D.
Executive Committee Meeting.....Immediately following - Arch Room

"Black Market Medicine"

On May 15, Prentice-Hall will publish "Black Market Medicine," by Margaret Kreig. It is the chilling and shocking story of hoodlum infiltration into the drug industry that may be one of the most widely discussed books of 1967.

"Black Market Medicine" reveals the heretofore unpublicized multi-million dollar counterfeit drug racket that threatens the health of nearly every person in the United States.

Science reporter Margaret Kreig literally took her life in her hands to ride with U. S. Food and Drug Administration inspectors on the trail of the vicious gangsters who are polluting the health stream of America at its very source.

Mrs. Kreig's first book "Green Medicine" gained national attention as a best-seller here and abroad. The author has contributed to **This Week, Reader's Digest, Good Housekeeping, Mademoiselle** and other major national magazines. She is a member of the National Association of Science Writers, and the International Narcotics Enforcement Officers Association.

Aging Population: By 1980, there will be 24.5 million people in the United States over the age of 65, the National Council on the Aging said. In 1966, acording to the Council, the U. S. had 18.5 million people over age 65.

A Public Health Service official today cautioned people who wear paper clothing that they risk burning themselves if they wear it near an open flame after it has been laundered, dry cleaned or worn in a soaking rain.

Dr. Richard E. Marland, Chief of the Public Health Service's Injury Control Program within the National Center for Urban and Industrial Health, said anyone wearing this new type of garment should discard it once it becomes soiled.

"The manufacturers themselves acknowledge that many of these paper dresses and other garments lose whatever flame retardant finish they have after washing," Dr. Marland said. "In fact, we are asking the Bureau of Standards to test samples of paper clothing to determine just how resistant these garments are to fire when they are new."

Donald B. Perry (left) the Supply and Service Officer of the State Board of Health, was presented the Most Outstanding Service Award for 1966 by Bryan R. Reep, president of the Public Health Academy.

Continued from Page 7

1965, a report was made on this program at the International Union Against Tuberculosis meeting in Munich, Germany. During this time the number of cases of tuberculosis had been cut in half in Halifax County.

Then, in 1960 a new program was developed in the field of chronic diseases which provides services particularly to stroke patients. This program was developed in cooperation with the State Health Department, with a new position for a public health nurse being added to the budget of the health department. Also, a physical therapist was provided by the State Health Department on a part-time basis to work with the local personnel. At the present time, a program has been developed with the Department of Physical Therapy at Duke whereby a physical therapist visits this county once a week from that medical center.

Two big research projects were conducted by the health department in cooperation with the National Institutes of Health, investigating an unusual eye disease and cleft palate. Funds were provided for the salary and travel of a public health nurse during a two year period.

One of the most important and exciting programs of the decade was begun in January, 1964, when Halifax County was selected as one of 21 communities throughout the Nation to participate in the Community Action-Studies Project. This project was of three major programs of the National Commission on Community Health Services. Dr. Ralph Kilby, who was assigned to this department by the Army to serve a year's Residency in Public Health, served as co-ordinator for this important project. Later, when Dr. Kilby's residency was completed, Mrs. Lois Batton, one of the public health nurses, continued as the co-ordinator. Twenty-one leading citizens in the county served as members of the Halifax County Health Commission, the local official agency for this study, with Mr. Paul Johnston of Littleton serving as chairman. The results of this program were reported to the Nation at the National Health Forum in New York City in May, 1966. Several major community health projects were recommended for Halifax County by the locral commission including, first, an increase in physicians and other medical personnel; second, the Human

Relations Center; and, third, a Rural Renewal Project.

Partially, as a result of the detailed study of the county made during the Community Action-Studies Project, an intensive Maternity and Infancy Care Program was approved for this county by the Children's Bureau in cooperation with the State Health Department. The main objective of this program is to improve the way of life of the patients who are eligible for this service and to produce a more adequate product of life. Eleven new positions have been provided the Halifax County Health Department for carrying out this program, while additional personnel have been added on the state level including Dr. John King, pediatrician and project director.

Furthermore, there are 18 consultants in the various state agencies and at the Duke Medical Center who assist with the planning and operation of the program. The clinics for this program are staffed by Dr. L. C. McCampbell, obstetrician, and by Dr. Miles Gregory, pediatrician, of Roanoke Rapids, and by residents in obstetrics from the Duke Medical Center. This service includes intensive prenatal care for medically indigent women and a specialized service in planned parenthood. Patients with complications are provided hospitalization at either Roanoke Rapids Hospital or the Duke Medical Center.

During 1966, a cooperative program was developed with the Halifax County School System with funds provided by the Elementary and Secondary Education Act which added four nurses. Later in the year four additional nurses were added by the cooperative program with the Multi-Service Center established by the Choanoke Area Development Association. These eight nurses are under the direct supervision of Mrs. Davis Clark, nursing director of this department. An additional servcie added by this Multi-Service Center is a bus which provides transportation for patients attending the various clinics operated by the health department.

During 1966, the Halifax County Health Department was officially approved as a Home Health Service Agency to participate in Medicare.

The highlight of the decade came when the Halifax County Health Department was given the Group Merit Award by the North Carolina Public Health Association in 1966. This award is given to the health department that is judged by the North Carolina Public Health Association as rendering the most outstanding service in North Carolina for a given year. The health department was given the Reynold's Award in 1951 for outstanding performance and particularly for developing a new case finding procedure in tuberculosis control.

In summary, then, the past decade has been a very rich and rewarding period for new public health programs in Halifax County. It is hoped fervently that these services will not only add "years to the life", but more hopefully, "life to the years" of the citizens in Halifax County.

STATE HEART CONVENTION AT DURHAM TO FEATURE TOP HEART SPECIALISTS

Nationally-known authorities on cardiovascular disease will participate in the North Carolina Heart Association's 18th Annual Meeting and Scientific Sessions to be held at the Jack Tar Hotel in Durham on May 17 and 18.

The Scientific Sessions are designed to keep North Carolina physicians up to date on the latest clinical and laboratory findings in the cardiovascular field.

THE HEALTH BULLETIN
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Money Making Ideas at Home

Perhaps you can turn a hobby into a money making idea, using your own home as your workshop. Here are some ideas:

If you have a phone and nice voice
Assurance service—small fee to call stay-ins daily.

Phone solicitation—notify local businesses that you will be glad to do this. Solicit customers for diaper service, magazine subscriptions, baby sitting, etc.

If you are handy
Fix-it shop—repair household appliances, watches, clocks, automobiles; refinish furniture; wood working; metal working.

If you have business skills
Typewriting and mimeographing —advertise; contact churches, clubs, small firms for overload.

Addressing envelopes by hand and by machine.

Part-time accounting for small firms.

Employment agency (from home)
Be income tax expert—contact individuals or accounting firms.

If you sew
Dressmaking

Make handmade items in quantity, such as aprons, potholders, patchwork quilts, monograms, hand-loomed mat sets, braided rugs, hand-knitted baby clothes, doll clothes, or rag dolls. Promote your products through friends, articles in local paper; exhibit work at fairs, bazaars, hobby and craft shows. Contact local stores.

Do Some Checking First

Consult your local library for information. Size up your neighborhood needs. Write for Government Bulletins. Check any sales products with Better Business Bureau. Ask Chamber of Commerce about license and other procedures.

"Your Home Can Be Your Workshop"
DYNAMIC MATURITY

THE HEALTH BULLETIN

The Official Publication Of The North Carolina State Board of Health

March 1967

Juanita M. Kreps, Ph.D.
of Durham

who presided at the Ollie A. Randall Award Dinner during the 16th Annual Meeting of the National Council on the Aging held in New York this spring. Dr. Kreps is in the Department of Economics of Duke University. (see pages 2, 8-13)

Justice for All Men – Even the Aged

Almighty God, Father of all creation, you constantly confront us — whether in belief or disbelief — and make us uncomfortable.
You battle and elude the grasp of our finite minds, yet you never move outside a concern and love for your creation.

Help us to be concerned.
Give us concern for those who are grown old. Not because they are old but because they are people — too often hurt — whose gifts and strengths are frustrated, by other people, by frailty of body, by loneness, by poverty, by the unfulfilled promises of their youth, by uncertainty as to who they are or — why.
Teach us compassion — wise, persistent compassion.

Give us a passion Lord for justice, for all men — even the aged.
Make us instruments of justice that in this great land they may enjoy thy bounty and the labors of their hands, to live secure, to have opportunity by right to live with dignity and to die with dignity, to be persons of worth, not cowering as un-persons without hope.
Give us a passion Lord for justice.

Dedicate us Lord: in the pattern of those who have given so much and done so much to bring some shining rays of hope to those grown old — They are leaders, persons of sensitive, generous, soaring spirit, unflagging zeal for service, often indignant, outraged at injustice, enriching us all with a deeper sense of compassion and justice.
In honoring them tonight, let their achievements be our continuing inspiration.
Dedicate us Lord — grant us grace to press for those things that are right and just in service to you who art eternal — Lord of Lords.

Invocation delivered at the 1967 Ollie Randall Award Dinner in New York, Sixteenth Annual Meeting of National Council on the Aging, by Harold W. Reisch, Secretary for Special Ministries of the Board of Social Ministry, Lutheran Church in America.

GOVERNOR MOORE PROCLAIMS SENIOR CITIZENS MONTH

North Carolina's Governor presents to former Senator Roy Rowe a proclamation designating MAY as Senior Citizens Month. Rowe, second from left, is Chairman of the Governor's Coordinating Council on Aging. Many activities are being carried on in May honoring the older citizens of the State. Also in the picture are Dr. John S. Rhodes, Chairman of Senior Citizens Month for the Council, at left; and J. Eddie Brown, Executive Director of the Council, at right. Dr. Rhodes, the Chairman for Senior Citizens Month, is a former member of the State Board of Health and a past President of the Medical Society of the State of North Carolina.

Rheumatic Fever Accounts for Much Heart Disease in Children

Rheumatic fever is said to account for much of the heart disease found in children and young adults.

Rheumatic fever usually occurs between the ages of 5 and 15, although adults can have it. It may affect any part of the body temporarily, but damage to the heart, which can be long lasting, is the greatest danger.

Rheumatic heart disease results from the scarring of the heart muscle and valves by rheumatic fever. This may interfere with the vital work of the heart. Many patients recover without permanent injury to the heart valves, but the disease has a way of repeaing itself and each attack renews the chances of heart damage.

Rheumatic fever is preceded by a streptococcal infection such as strep sore throat, scarlet fever or a strep ear infection. It can be prevented by treating the strep infection promptly and thoroughly with antibiotics. Because persons who have had rheumatic fever are susceptible rather than immune to repeat attacks, long-term preventive treatment is often prescribed for them. Regular doses of penicillin, under the direction of a physician, can prevent further strep infections and thus ward off subsequent attacks of rheumatic fever.

You can protect your child against rheumatic fever by consulting your doctor if the child develops a sudden, severe sore throat, or if he has been exposed to someone with scarlet fever or another strep infection.

A computer system that picks up inaudible speech changes in persons with early neurological disease and gives an immediate warning of their condition is now under development by the Public Health Service's National Center for Chronic Disease Control.

The system is scheduled to be ready for use in multi-phasic disease-detection programs in three years. It will spot neurological disorders before other symptoms are evident.

The first case of poliomyelitis to occur in New York City since 1964 has been reported.

The case is that of a 31 year old man who had a Salk vaccine series of injections ending five years ago. His wife and infant have been, or are in the process of, being immunized.

The Health Bulletin

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Vol. 82 March, 1967 No. 3

A Message By Acting Secretary

Of Commerce Alexander B. Trowbridge

Humanpower is a most precious resource. The waste of the talents of 19 million Americans aged 65 and over is indefensible at a time when talent is in premium demand, when only one in five senior citizens has a job, when five million elderly live below the poverty level, and when our senior population is growing at a rate of almost 4000 a day.

Many people think of us as a Nation of youth. It is true our youth population is growing. But our over-65 population is also growing —and, thanks to the increase in human knowledge, living longer.

In the last half century our older population has more than doubled. By 1985 we likely will have 25 million Americans 65 and over, and by the year 2000, more than 28 million. A busy, productive Nation—"a Nation on the move" as President Johnson has called it —cannot afford to waste this important reservoir of talent. It must not cast by the wayside any segment of our population because of the stigma of "overage."

Ability has no age. We must not deny opportunity to those who wish to fill a productive role in our society. This may even include having jobs created for them, and providing facilities, where needed, for their retraining to meet work requirements of the technological age.

The theme of Senior Citizens Month 1967 is "Meeting the Challenge of the Later Years". The talents, skills, and experience of our senior citizens have helped shape our country, make our economy strong, and give us the highest standard of living in the world. We need now and will need in years to come the example of their patience, stability, loyalty, and wisdom.

This is the challenge "of the later years" that faces not only the older American but the Nation as a whole.

MAY IS BEING OBSERVED AS SENIOR CITIZENS MONTH

Theme: "Meeting The Challenge of the Later Years"

Dr. John S. Rhodes, Vice Chairman, N. C. Governor's Coordinating Council on Aging and **Chairman of N. C. Senior Citizens Month** in North Carolina.

Activities:

The North Carolina Senior Citizens Convention in Greensboro—May 5th and 6th—Sponsored by N. C. Recreation Society.

Visitation Days to Shut-ins—Hospitals
Nursing Homes
Private Homes

Open Houses—Welfare Departments
V. A. Hospitals
Nursing Homes
Senior Citizens Centers
Housing for the Elderly

Trips— Bus Trips
Train Trips

Religious— Sermons at Churches

Social Activities—

Craft Fairs
Hobby Fairs
Fashion Shows
Dinners
Luncheons
Theater Parties
Baseball Games
Picnics, etc.

Dr. Scurletis Appointed Director of Personal Health Division

Dr. Jacob Koomen, State Health Director, announced the appointment on March 21st of Theodore S. D. Scurletis, M.D., as the new director of the Personal Health Division of the State Board of Health. Dr. Scurletis had been serving as Acting Director of this Division since the death of Dr. James F. Donnelly last summer.

The Personal Health Division, one of the seven divisions in the administrative structure of the Board, includes responsibility for Medicare, Maternal and Child Health, Chronic Disease, Crippled Children, the Medical Referral program for rejected draftees, Nutrition, and Nursing Home Licensing.

Dr. Scurletis was born in Pittsburgh, Pa., and received his B. S. and M.D. degrees from the University of Pittsburgh. After receiving his medical degree from the School of Medicine, Dr. Scurletis served his internship at Pittsburgh Hospital. The University continued him as instructor while for six years he was in private practice in pediatrics in Pittsburgh.

In 1961 Dr. Scurletis came to the State Board of Health as Pediatric Consultant in the Personal Health Division and in 1963 was named Chief of the Maternal and Child Health Section. Upon the death of Dr. James F. Donnelly last June, he was appointed as Acting Director of the Personal Health Division.

Active in the Cerebral Palsy Association, the Association for Retarded Children and various medical organizations, Dr. Scurletis makes a civic contribution beyond his professional duties. He married Christine Harrison in 1963 and they have two children, a boy and a girl.

Dr. Theodore D. Scurletis (center) was appointed in March as Director of the Personal Health Division by Dr. Jacob Koomen (right) State Health Director. Dr. John T. King (left) was named chief of the Maternal and Child Health Section.

One of the concurrent sessions during the 16th Annual Meeting of the National Council on the Aging meeting in New York this Spring.

Secretary of Labor, W. Willard Wirtz (left) accepting on behalf of President Johnson the Ollie A. Randall Award of the National Council on the Aging for Distinguished Service to Older People.

North Carolina's Senior Citizens

NORTH CAROLINA

DEMOGRAPHY

Over 65

In 1950	226,425 persons 65 and older 5.6% of population
In 1966	349,085 persons 65 and older 7.2% of population
In 1980	502,413 persons 65 and older
In 2000	655,741 persons 65 and older

Over 75

In 1950	65,000 persons 75 and over
In 1960	97,215 persons 75 and over 15,144 over 85
In 1980	180,977 persons 75 and over

Men to Women (age 65 & over)

1955	122 women to 100 men
1960	126 women to 100 men
1966	131 women to 100 men
2000	143 women to 100 men

Longevity

In 1949-1951	Life expectancy at 65 white males	13.1 years
	Life expectancy at 65 white females	15.4 years
	Life expectancy at 65 nonwhite males	13.4 years
	Life expectancy at 65 nonwhite females	15.4 years
In 1959-1961	Life expectancy at 65 white males	13.1 years
	Life expectancy at 65 white females	16.1 years
	Life expectancy at 65 nonwhite males	12.5 years
	Life expectancy at 65 nonwhite females	14.7 years

Senior Citizens in the United States

(next three pages)

FACT SHEET
SUMMARY FROM 15 YEAR APPRAISAL

DEMOGRAPHY

OVER 65

In 1950 12,269,637 persons 65 and older
In U.S. 8.1% of population

In 1966 18,500,000 persons 65 and older
9.4% of population

In 1980 24,500,000 persons 65 and over

In 2000 28,000,000 persons 65 and over

OVER 75

In 1950 3,854,000 persons 75 and over

In 1960 5,562,500 persons 75 and over
nearly 1 million over 85

In 1980 9,382,000 over 75

MEN TO WOMEN

1955	115 women to 100 men
1960	121 women to 100 men
1966	129 women to 100 men
2000	148 women to 100 men

STATE DISTRIBUTION

1950	Only New York had more than 1 million
1960	New York, Pennsylvania, California had more than 1 million
1965	New York, Pennsylvania, California and Illinois had more than 1 million
1965	One-third of all over 65 lived in 1 of 4 states; New York, California, Pennsylvania or Illinois
1985	New York and California over 2 million Florida, Illinois, Ohio, Pennsylvania and Texas; over 1 million.
1950	New Hampshire 10.8% over 65 (highest)
1965	Iowa 12.5% over 65 (highest)

LONGEVITY

In 1950	Life expectancy at 65 men 12.8 years Life expectancy at 65 women 15 years
In 1960	Life expectancy at 65 men 12.9 years Life expectancy at 65 women 16 years (Note: 1 entire year for women)

Older worker defined as over 45

1964 — 56 million over 45 in population
29 million in work force

1980 — 66 million in population
34 million in work force

(Mostly in 45-64 age group. Over 65 only about 400,000 of increase of 5 million between 1964 and 1980.)

SOCIAL SECURITY

1950 — 2,600,000 over 65 receiving benefits
1966 — 15,328,000 over 65 receiving benefits
2,000,000 between 62 and 65 receiving benefits

1950	average monthlybenefit for workers	43.86
	average monthlybenefit for widows	36.54
1965	average monthlybenefit for workers	83.92
	average monthlybenefit for widows	73.75

Between 1954 and 1965 wages increased by 49.3% - cost of living 21.9% - Social Security benefits 14.1%.

OLD AGE ASSISTANCE

1950 — About 25% (3 million) receiving OAA averaging $43 per month (from $18 per month in Mississippi to $70 in Connecticut)

1967 — About 11% (2 million) receiving OAA averaging $39.20 per month in Mississippi to $102 in California.

MINORITY GROUPS

NEGROES

Life expectancy at birth 7-8 years less than whites.

INDIANS

Average age at death 43.

HOUSING

1950 — 8.4% of all over 65 lived in dilapidated housing.

1960 — 19% of all units occupied by elderly dilapidated.

1960 — Cornell University estimate 45% living in unsuitable housing - 4½ million units needed to overcome shortage and provide appropriate housing.

1950-1965 — 310,000 units of special housing for aged built.

Nearly 66% of those over 65 own their own homes, about 40% over 50 years old, 80% over 30 years old.

INCOME

1950 — 77% over 65 had incomes less than $1000. per year.
Median income for unrelated individuals $646. per year.
Median income for families with head over 65 $1903. per year.

1965 — One-third unrelated individual's incomes less than $1000. per year
Three-fifths unrelated individuals less than $1500 per year.
One-fourth of families with head over 65 less than $2000. per year.
Two-fifths of families with head over 65 less than $3000. per year.
(Note: Poverty definitions $1500 for individuals.
$1850 for couple.)

1965 — 31% of all aged living in poverty by government definition.
Half of aged widows and non-married women less than $1000.
3% had incomes of over $10,000.

As aggregate persons over 65 represent a 40 billion dollar consumer market.

RETIREMENT INCOME

If Bureau of Labor Statistics "modest but adequate" budget ($1800 for individual and $2500 for retired couple) is accepted as standard, 2 million retired couples and 6 million unattached retired persons do not have adequate standard of living.

SOURCES OF INCOME

	1950	1960
Employment	31%	24.5%
Social Insurance (mostly OASI)	27%	73.4%
Old Age Assistance	22.2%	15.3%
Private Pensions	2.4%	8.5%

In 1963 earnings from work still account for largest proportion of income - 32% of aggregate money income for persons over 65.

About half aggregate income was reported by the 1 in 5 still employed and receiving wages - not social security benefits.

EMPLOYMENT

EMPLOYMENT TRENDS

1950 — 41.4% of males over 65 in labor force
7.8% of females over 65 in labor force

1965 — 27.8% of males over 65 in labor force
10.% of females over 65 in labor force

1980 — 31.3% of males over 65 in labor force
17.4% of females over 65 in labor force

Are You Immunized Against "Lockjaw"?

With the advent of the spring season of 1967 most of us are beginning to get out of doors again. There are gardens and lawns that need work and outdoor chores of all sorts that have accumulated during the winter.

With the return of outdoor activities comes once again the hazard of minor accidents, cuts and scratches. Most often these aren't serious and will heal quickly if properly cleaned and protected.

But sometimes these little scratches can be more serious. Sometimes they are the channel through which you could get tetanus (lockjaw).

Tetanus-producing spores lie dormant in the soil of your garden, the dirt of your garage, and the dust inside your house. These spores can infect you through the tiniest wound—a pin scratch, a bee sting or a small cut, says a pamphlet of the American Medical Association.

Tetanus spores may remain in your body for long periods without producing the disease. Or, they may produce poison effects in five to fourteen days, even though the wound has healed.

First signs of tetanus are irritability and restlessness. Muscles rapidly become rigid, eventually causing a clenched-jaw leer that gives tetanus its nickname—lockjaw.

When symptoms appear, the outlook is grim, even with the best treatment. To avoid the deadly consequences, be sure you are immunized with tetanus toxoid. When you are immunized, your body manufactures antibodies that will fight tetanus toxin. A booster is needed every ten years and whenever you are injured.

If you aren't protected, in an emergency there is no time for immunization. If you have no built-in immunity, your physician may inject tetanus antitoxin. An emergency shot, however, is not always effective.

Your only long-range guarantee against tetanus is immunization with tetanus toxoid. Only one of every four Americans has this protection. Have you? — American Medical Association.

———————————

PROGRAM OUTLINE

EASTERN DISTRICT, N. C. PUBLIC HEALTH ASSOCIATION AT THE CAROLINIAN, NAGS HEAD — MAY 25 - 26

THEME: Public Health and The Public

Thursday May 25

1:00-5:00 P.M. Registration
4:00 P.M. Business Meeting
Tag Along Welcoming Coffee
6:00 P.M. Social hour
7:00 P.M. **FIRST GENERAL SESSION**
Banquet—Informal Buffet
Dance

Friday May 26

7:00-8:30 A.M. Breakfast
8:00-9:00 A.M. Registration
9:00 A.M. **SECOND GENERAL SESSION**

Presiding: Dr. Melvin F. Everman, **President**
"Sarah Wilson"
Panel: Dr. Ralph Boatman, **Moderator**
Miss Sarah Goggins
Mrs. Jean Lassiter
Mr. William Shaw
Dr. Karl Van Horn

12:00 Noon Lunch

1:30-3:30 P.M. **SECTION MEETINGS**

Public Health Nurses—Anchor Room
Presiding: Mrs. Rose Pugh
Speaker: Miss Virginia Nelson, Department of Public Health Nursing, School of Public Health
Subject: Team Nursing

Joint Session—Sanitarians and Health Directors—Cypress Rooom
Presiding: A. K. Glover
Business
Speaker: Charles J. McCotter
Subject: Salt Marsh and Fresh Water Mosquito Control

Secretarial—Statistical Section—Gally Room
Presiding: Mrs. Louise B. Barber
Speaker: Dr. Lynn G. Maddrey, Chief Laboratory Division, State Board of Health

3:30 P.M. **THIRD GENERAL SESSION**
Section Reports—Section Officers 1968
Door Prizes
Adjournment

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DATES AND EVENTS

May, 1967

May 15-16 — National Public Relations Institute, Palmer House, Chicago, Ill.

May 17-19 — 37th Annual State-wide Industrial Safety Conference, Winston-Salem.

May 18-19 — Western North Carolina Public Health Association, Grove Park Inn, Asheville.

May 20-24 — State Medical Society Meeting, Pinehurst.

May 21 — National Tuberculosis Association Meeting, Pittsburgh, Pa.

May 21-26 — National Conference on Social Welfare, Dallas, Texas.

May 24 — Conjoint Session of State Board of Health and Medical Society of the State of North Carolina, Pinehurst.

May 25-26 — Eastern North Carolina Public Health Association, Carolinian Hotel, Nags Head.

May 26-28 — S. C. Heart Association—Annual Meeting and Scientific Sessions, William Hilton Inn, Hilton Head Island, S. C.

June, 1967

June 4-8 — Public Health Symposium on Program Planning, Philadelphia, Pa.

June 4-9 — American Water Works Association, Atlantic City, N. J.

June 11-15 — Air Pollution Control Association, Cleveland, Ohio.

June 16-17 — American Geriatric Society, Claridge Hotel, Atlantic City.

June 18-22 — American Medical Association (Annual), Atlantic City, N. J.

June 25-29 — American Society of Medical Technologists, Miami Beach, Fla.

June 25-29—American Veterinary Medical Association, New Orleans, La.

June 12-16 — Mental Health Workshop, Pisgah View Ranch, Candler, N. C.

July, 1967

July 2-7 — American Physical Therapy Association, Miami Beach, Fla.

July 10-13 — Institute: Tuberculosis and Other Respiratory Diseases (Blue Ridge Assembly), Black Mountain.

THE HEALTH BULLETIN

The Official Publication Of The North Carolina State Board of Health

GOVERNOR DAN K. MOORE is presented a printed copy of the proceedings of the most successful meeting of the Governor's Conference on Child Abuse which was held late last year. An attendance of over 650 persons representing many disciplines working in private, voluntary and public areas attested to the wide interest and the quality of the program. In the picture taken in the Governor's Office are (from the left): Dr. Jacob Koomen, State Health Director; Dr. T. D. Scurletis, Chairman of the Coordinating Committee on Special Needs of the N. C. Health Council; Governor Moore; and E. N. Herndon, President of the N. C. Health Council.

Two Percent of Nation's Counties Hold Key To Reduce Infant Mortality

More than 30,000 infants a year might have lived to maturity if each of the nation's 3,130 counties had achieved the 18.3 per 1,000 live births infant mortality rate that 10 per cent of the counties reached.

This is shown by a county-by-county study of infant mortality for the period 1956-60 by the Children's Bureau, Welfare Administration, Department of Health, Education, and Welfare.

The study shows that less than 2 percent (56) of the nation's counties hold the key to any successful effort to sharply reduce the nation's infant mortality rate. A third of the deaths over the 18.3 rate achieved by counties with the best infant mortality rates occurred in these 56 counties, which contain nearly all the densely populated urban areas in the nation.

Among the 56 counties, the study found that in 21 of the most populated areas, including the ten largest cities, the average per year per city excess of infant deaths over the 18.3 rate was 400.

With this knowledge, the Children's Bureau is focusing its special project grants for maternity and infant care on "high risk" mothers-to-be from the low-income neighborhoods in these key areas.

The projects were authorized under the 1963 Maternal and Child Health and Mental Retardation Planning Amendments and now number 53. Almost 200,000 maternity cases have been served in the projects, most of them considered "high risk."

"It is among these maternity cases that studies show the highest rate of low birth weight infants being born, almost three times the national average. Babies born to these mothers also have the highest infant mortality rates," said Dr. Arthur J. Lesser, Deputy Chief of the Children's Bureau.

"Reports from these projects indicate that they may be having a significant effect on infant mortality rates," Dr. Lesser continued. "In Chicago, for example, among 14,380 infants born in census tracts served by the program in 1965, the infant mortality rate was 34.5 while among 9,044 births in similar low-income census tracts without the program, the infant mortality rate was 57.4."

"Although we are extremely pleased with the results reported so far to the Children' Bureau from these special projects," Dr. Lesser said, "We know that much more must be done. These special projects are only part of a whole structure of services and programs—including medical care, housing, nutrition, better education and communication, adequate maintenance, and social welfare services—which must be made available if we are to make any real reduction in the rate of infant mortality and of premature births."

Cigaret Testing: The Federal Trade Commission will begin testing cigarets for tar and nicotine content within the next two months, FTC Chairman Paul Rand Dixon told the House Commerce Committee. He said the agency has received excellent cooperation from the tobacco industry.

Scientists at Tufts University, Medford, Massachusetts, will study the advantages to the driver of using convex rear-view mirrors and other new types of rear-view display systems in an automobile instead of the conventional flat mirror.

Brains Across The Sea

by

Ronald Schiller

If the United States continues to siphon off the best scientific talent from other countries, the world, sadly out of balance, may become yet more unevenly divided. A dilemma looking for a solution.

If you are admitted as an emergency patient to a hospital in Delaware, New Jersey, North Dakota or West Virginia, chances are that you will not be treated by an American doctor. Over half of the resident physicians in the accredited hospitals of those states are foreigners who earned their medical degrees abroad. In certain hospitals in Illinois, Maryland, New York and Rhode Island, you might never even see an American doctor.

Throughout the United States, 28 percent of all medical internships and residencies are filled by foreigners—and a lucky thing for us. Each year our hospitals need 5500 more physicians than our medical schools graduate.

Some 11,000 foreign interns and residents are now serving our nation's hospitals. Officially, they are here to further their medical education and to gain experience that will serve them when they return to their own countries. Actually, at least 25 percent of them end up living here permanently. Of the physicians admitted to practice here last year, 1488—almost 17 percent—were foreigners. To replace them, we would need 15 new medical teaching centers, which would cost some $1 billion to build, plus at least $100 million a year to operate. This considerably exceeds the medical assistance that we now dispense to the rest of the world.

"In effect," says Sen. Walter F. Mondale of Minnesota, "the richest nation on earth is being subsidized by the poorer nations."

Particularly disturbing is the fact that almost 80 percent of our foreign physicians come from developing nations whose medical needs are vastly greater than ours—from India, Pakistan and Thailand, where there is one physician per 5000 to 9000 of the population; from the Philippines, Turkey, Colombia and Peru, where each doctor serves an average of 2000 to 3000 people. In 1963, South Korea, half of whose counties do not boast a single physician, sent us 207 medical graduates.

Moreover, our importation of physicians is accelerating. Each year some 18,000 medical graduates throughout the world pay to take the day-long examinations—administered twice yearly—which qualify them to practice in the United States. Approximately 7000 doctors pass the tests every year, representing a reservoir of talent that we can call upon.

Widening the Gap. Physicians represent only one wave in a massive tide of skilled professionals now sweeping from the poorer to the richer countries. The demand for educated talent among the most advanced Free World nations is spiraling upward at a rate faster than all of their fast-growing universities can meet it, either now or in the foreseeable future. Thus, last year alone, the United States welcomed 5479 graduate engineers and scientists, 5164 teachers and professors, 1623 accountants, 4247 nurses, 2552 technicians, and tens of thousands of others with advanced training. These were permanent immigrants; others entered on working visas.

This "brain drain" has become a source of increasing anxiety throughout the world. Ultimately it poses a threat to world peace. For without substantial resources of trained and educated manpower everywhere, the gap between the rich and poor nations cannot be narrowed. "Regions failing intellectually," states scientist Lloyd V. Berkner, "will remain chronically poor, in colonial status to more advanced nations."

The irony is that no other country approaches the United States in the amount of effort and money spent to educate the people of the developing nations. Approximately 100,000 students come to U. S. universities for advanced training every year—to be educated for service in their own countries. But an estimated 90 percent of the Asian students, 50 percent of those from the Near East, Greece and Egypt, and large proportions from Africa and Latin America never return home.

Further, by eliminating national quotas and giving piority to professionals, the U. S. Immigration Act of 1965, whose commendable purpose was to end discrimination based on race or national origin, had the unforeseen effect of accelerating the brain drain. The year the new law went into effect, the number of professionals immigrating from India jumped from 54 to 1750; from South Korea, from 51 to 400. The influx cancels out the effectiveness of our foreign-aid, technical-assistance programs.

Put and Take. The United States is not the only beneficiary of the world-wide braindrain, nor are the poorer countries its exclusive victims. Norway, Switzerland, Italy, the Netherlands and West Germany have been heavy losers in Europe. In actual numbers, however, no country has suffered more than Great Britian. British newspapers and professional journals blaze with advertisements from U.S., Canadian, New Zealand and Australian companies seeking specialists of every kind. U.S. firms offer "transportation costs . . . advanced study in your field . . . opportunities for speedy advancement," and salaries usually double those that can be earned in Britain.

In 1964 alone, 5900 British teach-

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ers, 4400 nurses, 4200 engineers and 1200 physicians—equivalent to 40 percent of that year's graduates—emigrated. But sympathy for the nation's plight is tempered by the fact that in the same year, Britian acquired 3300 teachers, 1600 engnieers, 1300 nurses and 300 physicians from less privileged nations. A startling 40 percent of the medical personnel serving in the British National Health Service came from such areas as Pakistan, India and the West Indies.

Similarly, France has received more professors and physicians from her former colony, the new African nation of Togo, than she has sent to that country. France also provides employment to an estimated 3500 university-trained South Vietnamese, who are desperately needed in their own hard-pressed nation. To compensate for the flight of their own technologists, the nations of Western Europe employ more scientists and engineers from Turkey and the Arab nations than do their own countries. And Canada, which lost 920 engineers to the United States in 1964, admitted 2000 from abroad that year, including many hired sight unseen from Spain and Argentina.

Skimming the Cream. More significant than the quantity is the quality of the professionals who migrate. "Every country is short of the brightest people because God didn't make enough," says Harry S. Hoff, consultant to the United Kingdom Atomic Energy Authority. But it is these very people who are lured away.

British science will not easily replace 38-year-old medical reseacher Ian Bush, who in 1964 left for the Worcester (Mass.) Foundation for Medical Research with his entire staff of scientists and technicians. The Japanese electronic industry suffered an equally severe setback when Dr. Leo Esaki, developer of electronic devices used throughout the world, took a job with a U.S. firm.

No nation can afford the continual loss of its most brilliant and productive minds without suffering severe economic consequences. The effect of such loss on the less developed countries amounts to "a national catastrophe," in the words of Charles V. Kidd, President Johnson's scientific adviser. Many of the nations of the world are so short of trained manpower that a university department may be forced to close when a professor leaves, children go untaught when a teacher moves, and thousands be deprived of medical atention when a physician migrates. Further, in emerging nations the professionals contitute that sliver of the population which provides leadership. They are the catalytic agents for improvement without whom the nation stagnates.

Farewell With Regret. A major motivation in the flight of talent is the desire for an adequate income. "The scientist is enabled to study thanks to the efforts of all his countrymen—farmers, laborers and intellectuals alike," Bernardo Houssay, Nobel Prize-winning biologist, reminded his fellow Argentinians. "He owes it to them to repay that debt." But the 206 scientists who left Argentina last year—some of whom earned less than $2000 annually—felt they could not afford to heed his plea. An Italian microbiologist at Massachusetts Institute of Technology wrote his sponsors in anguish to explain why he was breaking his promise to return home: "I do not expect to live in luxury, but at 32, with two degrees, I cannot live even decently on the $290 a month offered me in Italy." "I love Britain, and would like to stay," was the comment of a 40-year-old heart surgeon to official pleas that he remain. "But Britain won't afford to keep me."

Yet these countries are not so impoverished that they cannot provide a better living for their professionals.

A second reason for leaving is the difference in working facilities. "Although my salary will be doubled," said Dr. John Raison, a leader in research on the heart-lung machine, "that is not the reason I am leaving England. I have 20 years more work ahead of me which I cannot do with the facilities avaliable in Britian." A senior Italian physicist says, "I myself encourage young scientists to go. There is nothing for them to work with here." Yet, he observes, Italy has the funds; what it lacks is a belief in the importance of research.

In several emerging nations, the problem is underemployment of professionals. The enthusiasm with which governments plunge into ambitious educational programs backfires when they neglect related industrial development. Jobless engineering graduates of Sudan's Khartum University came close to rioting because there was nothing for them to engineer. It is estimated that 40 percent of Burma's scientists and engineers cannot find jobs in their professions, nor can 35,000 university graduates in the Philippines. Comments a Yale University graduate dean: "I find it difficult to advise an engineer from India, who is offered a $10,000-a-year job here or in Canada, to go back to his country where he may be a clerk-typist for the next ten years."

Imperative: Close the Gap. A drastic ban on migration or foreign study would, in effect, be a Western version of the Berlin Wall. But U.S. agencies are now making efforts to reduce the number of foreign students allowed to remain here after completion of training. These agencies are also trying to persuade industry, universities and hospitals to modify their recruitment efforts abroad. Another step would be for foreign countries to require students to concentrate on courses vital to their homelands; and to have adequately-paid jobs waiting for them, permitting them to make use of the skills acquired.

President Lyndon Johnson has advocated that we help build multinational institutions for advanced training in science and technology—in South America, Africa and Asia—so that fewer students will have to go to advanced nations to study. Brazil and Uruguay have already earmarked funds for the project. Senator Mondale has urged that U.S. aid organizations spend more of their money on projects specifically designed to use the talents of unemployed professionals abroad.

U.S. private industry is beginning to establish some of its engineering and scientific research facilities in Europe and the Middle East to take advantage of surpluses of trained manpower there. This arrangement stands to benefit everybody. The U.S. company gets research findings; the home country gets the investment and the salaries paid, plus the increase in knowledge and skill acquired by the professionals. Most important, these professionals are not lost to their homelands: they may well be re-employed by local industries when needed.

"World security, and American security, depend on development of the less privileged countries at sufficient speed to satisfy at least a portion of their national aspirations," says Secretary of Defense Robert McNamara. If the most talented members of the poor nations continue to be absorbed by the rich societies, we shall never begin to close the gap that finds the per capita income at $3000 a year in America, while in more than half of the rest of the world it averages only $120.

Day Care Health Needs Information Now Available

Detailed information about the health needs of children in day care is available for the first time in a new publication of the Children's Bureau, Welfare Administration, Department of Health, Education, and Welfare.

In announcing the publication, "Children in Day Care—with focus on health," Mrs. Katherine B. Oettinger, Chief of the Children's Bureau, said today, "A number of excellent textbooks and pamphlets have been written on child health in general, but never before has it been studied specifically for the child in day care."

Written by Mrs. Laura Dittman of the Committee on Day Care, Maternal and Chlid Health Section, American Public Health Association, the pamphlet makes it clear that in order to assure comprehensive health care for each child in a day care program, a complete picture of that child and his environment must be obtained. Every aspect, geographical, socioeconomic, and physical, which might influence his development must be considered when outlining a health plan for him. "Children in Day Care," therefore, studies the special needs of different ages and groups of children and relates them to day care.

For example:

—Since an infant is particularly vulnerable to infection and disease, day care workers should check with the child's parents to make sure he has received proper preventive medication including immunization.

—A child's third and fourth years are crucial in arresting permanent dental, hearing, and visual defects. Professional screening should therefore be an integral part of every day care program for preschoolers.

—Special precautions should be taken to prevent accidents in a day time program which cares for children of school age, for accidents are the largest single cause of death among school age children.

—A handicapped child must be given every opportunity to care for himself. Such normally routine activities as eating, dressing, toileting, and washing can be of great value to such a child as physical, mental, and emotional therapy.

—The child of migrant workers will require particularly strict nutritional supervision while in day care. His regular diet usually consists of hastily prepared foods, low in nutritional value, and varies as his parents follow the crops.

Copies of the publication may be purchased for 50¢ each from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 20402.

Thalidomide Charge: Nine officials of Chemie Grunenthal, the German chemical firm that produced thalidomide, were charged with deliberately causing bodily harm and with manslaughter through neglect. The public prosecutor of Aachen charged that the officials had placed the drug on the market even though preliminary tests showed it caused damage to the nervous system. He said about 5,000 children had been born with deformities after their mothers took thalidomide during pregnancy.

National Pesticide Monitoring Site


FISH
MARKET BASKET SURVEY
REGIONAL FOOD COMMODITY SAMPLING
PEOPLE
SHELLFISH & ESTUARIES
SOIL
WATER
WILDLIFE

Archery Lesson — A Counselor shows Campers how to hit the target at Camp Easter-in-the-Pines at Southern Pines.

Imagine Your Other Self at Camp Easter-In-The-Pines

Summer itineraries of many physically handicapped children in North Carolina are pointing toward Camp Easter-in-the-Pines at Southern Pines. The attraction is the camping program that will be operated by the North Carolina Society for Crippled Children and Adults through Easter Seal contributions.

H. L. Hawley, Executive Director of the Society, announced that dates for the 1967 camping season are June 18, to August 10, with three two-week sessions for crippled children. The last two weeks of the season, beginning July 30, will be given over to a camping session for handicapped adults.

The Easter Seal Camp, operated by the Society since 1964, provides recreation specially modified and adapted for the crippled. Stairways are replaced by ramps; handrails are installed, doorways are wide enough to permit easy passage of wheelchairs, and shower stalls are easily usable even though campers may not be able to walk without the aid of special appliances.

But otherwise, Camp Easter-in-the-Pines is pretty much like any other summer camp. Children have the chance to swim, shoot, hike, boat and sleep under the stars just like children without handicaps.

It may seem impossible to some that

children in wheelchairs, with braces on their legs, or restricted to crutches could take part in outdoor activities at camp. But rehabilitation experts agree that Camping offers the physically handicapped therapy they could not receive in a clinic.

The excitement of going to Camp seems to work wonders on children who are barred from many normal activities at home. Their eagerness to participate helps them move a little closer to overcoming their handicaps. Here, they have the chance to experience nature first-hand and many are "on their own" for the first time.

As the needs grow, Camp Easter-in-the-Pines is being expanded to meet them. Last year the Society added a second 4-cabin and bathhouse complex. But needs are even greater, and plans call for more improvements next year so that a stay at Camp Easter may be possible for more crippled children and adults.

Anyone who may know of a physically handicapped child or adult who would benefit from wholesome outdoor activities at Camp should write to: Coordinator, Camp Easter-in-the-Pines, P. O. Box 1099, Southern Pines, North Carolina.

The first laboratory confirmed case of dog rabies in more than two years recently occurred in Surry County. Although no human exposures occurred from this case, it should serve as a reminder that rabies remains an enzootic disease in wildlife and can spread to epidemic proportions in an unimmunized dog population. In Surry County it was estimated that only ten percent of the dog population had been immunized against rabies. Seventy percent of a community's dog population must be immunized against rabies to preclude the possibility of an epidemic situation.

New Drug May Benefit Manic-depressive Psychosis

A potentially effective drug treatment for one of the most serious forms of mental illness was outlined recently by a National Institute of Mental Health scientist. The disorder, manic-depressive psychosis, affects many people and is present in a sizeable proportion of the Nation's 25,000 suicides a year.

Dr. William E. Bunney, Acting Chief of the Institute's Section on Psychosomatic Medicine, confirmed the finding that lithium carbonate, an inexpensive white powder, effectively controls this illness in many patients. It checks the intense manic excitement, and overactive, irritable patients become calm under its treatment.

Dr. Mogens Schou in Denmark, one of the principal investigators of the therapeutic usefullness of lithium, has recently reported that the drug seems to act as a preventive of both manic and depressive attacks. These are probably two aspects of a single underlying process, Dr. Bunney explained. If further research bears out present findings, lithium will become an important weapon in the fight against this very severe mental illness.

However, in contrast to lithium's action in mania, Dr. Bunney said, a question remains about its usefulness in acute depressive episodes. This area is now undergoing intensive study.

The Institute's research, which extends the work of earlier investigators—particularly that of Dr. Schou, was described before the Missouri Institute of Psychiatry in St. Louis.

American Medical Association Begins A New Section "Medicine and Religion"

Consider These Reasons

Physicians have long been troubled by the knowledge that playing the role of healer sometimes requires them to "play God," too.

Consider this case:

A 10-year-old Louisiana boy is dying from kidney disease. The physician knows it's possible to transplant a kidney from the boy's healthy twin brother, leaving the healthy twin with one kidney.

Sometimes the operation fails, but in a number of cases, it succeeds; more than 500 people are alive today with transplanted kidneys.

Regardless of whether the sick boy recovers, however, the physician is haunted by one thought: suppose something goes wrong with the healthy twin's remaining kidney. A person can live a normal life with one kidney—that's what supports the theory of transplantation from live donors—but one cannot live without any kidneys. Disease could cut down the boy at any time.

By deliberately removing a healthy, functioning part of the boy's body, has the physician consigned him to possible future death?

Or are the parents responsible? They gave permission for the operations. Was the physician merely a technician, carrying out their orders?

And what of the healthy boy? He's a minor. Does he have any rights in the matter? Could there be a case in which parents used unusual coercion on such a child to save the life of another?

These are some of the questions that trouble medical men of conscience on transplantation. Other areas of medicine present similar questions of ethics and morality.

This is why the Journal of the American Medical Association is beginning a new section, "Medicine and Religion," designed to discuss these issues. The first question-and-answer section (on tranplantation) appears in the April 10 Journal.

Here's part of what Joseph E. Murray, M.D., a Boston surgeon, had to say about the problem of the 10-year-old twins:

"Organ transplants, as a therapeutic maneuver to prolong life, are certainly justified as far as the recipient is concerned.

"The source of the kidney, however, provides a major moral, legal, and ethical problem," Dr. Murray said. "If the source is a recently deceased individual whose nearest relatives have voluntarily donated the kidney, there is no problem. If the source is an elective (kidney removal) for the benefit of another human being, and a kidney is used which would otherwise be discarded, again, there is no problem. However, when the donor is a living healthy volunteer, either a member or a nonmember of the family, a definite problem arises. Here we are embarking on a major surgical operation with a slight, but definite, risk from anesthesia, operation, or postoperative complications.

"This procedure is not for the benefit of the person being operated on, but for someone else. All previous medical and surgical training has been geared to weighing the advantages and disadvantages in any one patient of a proposed therapeutic measure. In this instance, however, for the donor a physiological deficit will always occur, and no possible good can accrue to him physically."

Dr. Murray pointed out, however, that the kidney donor may derive "a certain spiritual benefit" from the donation, which is "probably the purest form of charity next to the giving of one's life."

"For a truly unpressured volunteer, this spiritual satisfaction can more than compensate for the physical trial of a nephrectomy."

Hess Gets Federal Award

The National Civil Service League has named Arthur E. Hess, Deputy Commissioner of Social Security, as one of the year's 10 outstanding public servants in the Nation, Robert M. Ball, Commissioner of Social Security, announced today.

"Career Service Awards" are given annually by the League to recognize career public employees for outstanding contributions to the general welfare, and to stimulate able young people to choose careers in Government.

The National Civil Service League is a nonpartisan, non-profit citizens' organization founded in 1881 "to promote efficiency in Federal, State, and local government." The Awards program was first established in 1954, with the 130 winners to date constituting a roster of top excellence in the Federal service.

Commenting on the award, Commissioner Ball said, "The League's recognition of Art Hess' contributions to the programs within the responsibility of the Social Security Administration, and through them, to the security and independence of millions of Americans, comes as no surprise to those of us who have worked closely with him over the years. "Whenever there has ever been a very big job of implementing a program just enacted by Congress, we have had a way of turning to Art Hess and assigning him a leading role in transforming the legislative blueprints into effective working realities. This was the case with both the disability insurance program, first enacted in 1954, and the medicare program, passed by Congress in 1965. The smoothness of the start of each program, and their early arrivals at a level of efficient and economical operation are due in no small measure to the administrative talent of Art Hess."

Hess, now 50 years of age, and a native of Reading, Pa., began his career in social security 27 years ago shortly after his graduation from Princeton University. While engaged in research activities for the agency, he studied for and earned a law degree from the University of Maryland in Baltimore, and was accepted as a member of the Maryland bar. After 11 years as Director of the Bureau of Disability Insurance, he was named Director of the Bureau of Health Insurance in 1965, where he played a leading role in bringing medicare to over 19 million older Americans. He has just been promoted to the position of Deputy Commissioner of Social Security, where he will continue to have a hand in the administration of medicare while also assisting the Commissioner of Social Security in overseeing the Administration's other programs.

Other 1967 "Career Service Award" winners are: Philip N. Brownstein, Department of Housing and Urban Development; Horace D. Godfrey, Department of Agriculture; Donald G. MacDonald, Agency for International Development; William H. Smith, Department of the Treasury; O. Glenn Stahl, U. S. Civil Service Commission; David D. Thomas, Federal Aviation Agency; Floyd LaVerne Thompson, National Aeronautics and Space Administration; Barbara McClure White, U. S. Information Agency; and Marjorie J. Williams, M. D., Veterans Administration.

The awardees will be honored at a dinner ceremony in Washington, D. C., on April 21, 1967, at which the principal address will be delivered by John W. Gardner, Secretary of Health, Education, and Welfare. In addition to the League's recognition of their individual excellence in public service at the Federal level, the awardees are tendered a $1,000 tax-free cash award by the program.

Hess and his wife, the former Nancy Davis of Wilkes-Barre, Pa., and their two youngest daughters reside at 4805 Woodside Road, Baltimore, Maryland.

Birth Control: About 11 million women—at least half of them Americans—now use oral contraceptives, according to a report from Planned Parenthood-World Population.

Community Hospitals Offered Disaster Care Items

A thirty-day supply of critical medical items for disaster care is being offered to community hospitals in North Carolina. These items, known officially as the Hospital Reserve Disaster Inventory (HRDI), will augment normal hospital shelf inventories to the extent of providing the acute care medical supply needs for approximately thirty days.

It is anticipated that eventually every hospital in the State will be eligible to participate in the HRDI Program. Initially hospitals participating in this program will be selected by the Public Health Service in accordance with criteria and standards established for emergency planning and location. To be eligible for the HRDI Program, community hospitals must meet the following criteria:

1. Be located within fifty (50) miles of the city limitis of the central city of a Standard Metropolitan Statisitical Area (SMSA) having 250,000 or more population,
2. Having fifty (50) or more beds; and
3. Have the operational capability to establish a comprehensive disaster program.

The two major advantages in stockpiling medical supplies in community hospitals are (1) they will assist the hospitals in their primary responsibilities of patient care and community health and will assure the availability of supplies for a thirty-day period if regular supply channels are disrupted, and (2) it provides an opportunity to rotate supplies that might deteriorate in storage. The hospital will utilize these emergency supplies in its daily operations and will continue to purchase such supplies on its regular schedule thus maintaining its normal inventory at the same time.

The North Carolina State Board of Health is the State agency having primary responsibility for the Medical Stockpile program in North Carolina. Therefore, contracts that are negotiated between the Public Health Service and the hospital participating in the HRDI Program will be coordinated with the State Board of Health to insure the continuity of emergency health service operations both at the State and local level.

At the present time there are fifty (50) Packaged Disaster Hospitals (PDH) in North Carolina. These hospitals, on a selective basis, will be affiliated with community hospitals. By providing community hospitals with PDH's as well as HRDI Units, it will insure the State a minimum amount of essential stockpile medical items necessary for any type of disaster. The plan to assign the responsibility for each PDH to a community hospital is a step toward insuring operational capability for each prepositioned hospital.

Community hospitals agreeing to affiliate with a PDH will be asked to (1) develop a utilization plan for the PDH, and (2) rotate pharmaceuticals in a PDH with their regular stocks, if practical. The contract covering PDH rotation items and utilization planning will be between the community hospital and the Public Health Service.

The contract covering the major components of the PDH will continue to be negotiated between the North Carolina State Board of Health and Public Health Service, and the County Civil Defense agencies and County Health Departments with the North Carolina State Board of Health. The eventual goal is to have every PDH in the State affiliated with a community hospital.

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DATES AND EVENTS

June 18 - 21 — N. C. Veterinary Medical Association, Durham, N. C.

June 18 - 22 — American Medical Association (Annual), Atlantic City, N. J.

June 19 - 21 — North Carolina Hospital Association, Annual Meeting, Grove Park Inn, Asheville, N. C.

June 25 - 29 — American Society of Medical Technologists, Miami Beach, Fla.

July 2 - 7 — American Physical Therapy Association, Miami Beach, Fla.

July 10 - 13 — Institute: Tuberculosis and Other Respiratory Diseases (Blue Ridge Assembly), Black Mountain, N. C.

Aug. 9 - 13 — Sixth Annual Southwide Lawyers & Physicians' Conference, Lake Junaluska, N. C.

July 9 - 12 — American Veterinary Medical Association, Dallas, Texas.

A baby in the United States today has less chance for survival than in 14 other countries. And the blame can be placed on poverty—with its concomitants of inadequate nutrition, lack of education, early pregnancies, illegitimacy, and, especially, premature births. A computerized analysis performed at George Washington University shows that less than 2% of all counties in this country account for ⅓ of the excessive mortality rates.

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THE HEALTH BULLETIN

The Official Publication Of The North Carolina State Board of Health

Special Issue
North Carolina's
State Health Directors

Jacob Koomen, M.D., M.P.H. 1966—

The First Fifty Years of Public Health in North Carolina

Excerpts from "A History of the N. C. State Board of Health—1877 to 1925" by B. E. Washburn, M.D.

The year 1909 proved to be an eventful one in the history of public health of North Carolina. In that year, the General Assembly voted an increase in the annual appropriation of the State Board of Health, enabling it to employ a health officer for his full time.

The State Board had been organized in 1877 and had been directed by two part-time secretaries who achieved remarkable success.

The two secretaries of the State Board who conducted the pioneer health work so successfully were Dr. Thomas F. Wood from 1879 to 1892, and Dr. Richard H. Lewis from 1892 to 1909. A review of their activities is inspiring.

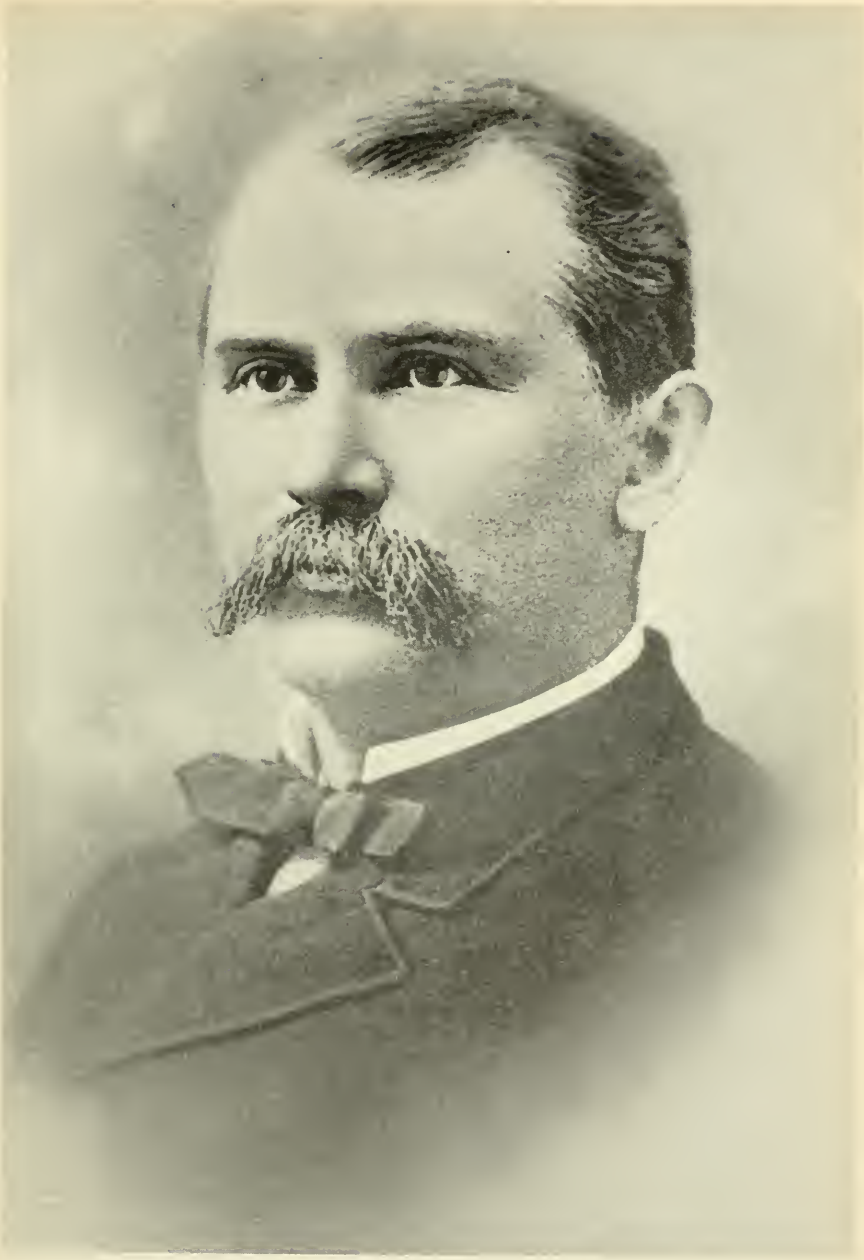
During this formative period, the appropriations had been woefully inadequate, at times insufficient even to pay postage on the health literature they prepared and distributed. Under their direction, however, the North Carolina Board became recognized by health authorities throughout the nation; this is especially true of its organization which largely removed it from politics and stresed the importance of local (county) health organizations. The Board being appointed jointly by the governor of the State and the State Medical Society, had been able to influence the Legislature to enact measures important to public health.

The recognition that disease prevention is the responsibility of society as a whole came to North Carolina in 1877 when its State Board of Health was created.

The history of public health is reflected in the progress of disease prevention carried out in North Carolina under the direction of the State Board of Health. At the time of the Board's organization in 1877, disease prevention was sought largely through improvement of the environment; but advances in medicine as they applied to the control of infectious diseases were readily adopted. With this came the importance not only of clean surroundings but especially the provision of safe drinking water and sewage disposal by towns and cities. From its beginning, the Board recognized the need for vital statistics as a means of measuring progress. The inspection of state schools and institutions was carried out as well as the inspection of prisons and mental hospitals.

Immediately following the Civil War, the State Medical Society discussed the need of a state board of health and advocated its provision. In this, the Society had the support of leading citizens throughout the State who had seen the terrible conditions brought about during the War due to the lack of organized health work and sanitation.

A committee was appointed to place the matter before the Legislature; the members of the committee were Drs. S. S. Satchwell of Pender County; R. L. Payne of Davidson County; Marcellus



Thomas F. Wood, M.D. 1877-1892

Whitehead of Rowan County; and George A. Foote of Warren County. The committee went to Raleigh in 1877 for the meeting of the General Assembly and remained there for most of the session, being joined by Drs. Eugene Grisson and M. J. Pittman. These doctors were successful in securing the passage on February 12, 1877 of a bill to establish the North Carolina State Board of Health.

The Board of Health, as established by the General Assembly, was to consist of all the members of the State Medical Society who were to be the medical advisers of the State and as such give advice to the government "in regard to the location and sanitary management of public institutions."

An annual appropriation of $100 was made to meet the expenses of the Board.

The organization of the State Board of Health was effected at the following annual meeting of the State Medical Society held at Salem on May 23, 1877. Dr. S. S. Satchwell was elected President and Dr. Thomas F. Wood, Secretary and Treasurer.

The annual appropriation of $100 made by the Legislature was ordered to be paid to the Treasurer of the State Medical Society.

On March 14, 1879, the "Act Supplemental to an Act Creating the State Board of Health" passed both houses; and the Board thus created has functioned ever since with, of course, many modifications and changes.

Under provisions of the new act, the Board of Health was to be made up of nine members. Six of these were to be chosen by the State Medical Society from its active members and three to be appointed by the governor. It was specified that one of the members appointed by the governor was to be a civil engineer.

The members appointed by the Medical Society were to serve two for six years, two for four years, and two for two years; while those appointed by the governor would serve for only two years. All vacancies were to be filled by the Board of Health. The officers of the Board were to consist of a president and a secretary-treasurer. The latter was to be paid for his services, the amount to be fixed by the Board.

The general duties of this new board included all the items named in the 1877 act, these being included in the "Supplemental Act of 1879." In addition, provision was made for the publication of bulletins whenever there occurred an outbreak of disease in epidemic proportions, the object being to inform the public on how to prevent and stop the spread of dangerous diseases. Chemical examination and analyses of water were to be carried out; and auxiliary boards of health were to be organized in each of the 94 counties of the State.

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Richard H. Lewis, M.D. 1892-1909

The State Board of Health was voted an annual appropriation of $200 to carry out these numerous items.

Under the provision specified in the act, the organization of the State Board of Health took place on May 21, 1879 just a few weeks after the act had been passed by the General Assembly.

The members of the 1885 Legislature were evidently impressed by the efforts being made by the State Medical Society, especially since the people of the State were showing interest in the matter. The General Assembly amended the laws so as to make the county boards more efficient; the annual appropriation was increased from $200 to $2000; and a contingent fund of $2000 was set up to be expended with the approval of the governor whenever an epidemic occurred; also, printing privileges not to exceed $250 annually were extended to the Board.

As a result of the increased appropriation and the added printing privilege, the Board began the publication of a health bulletin, this being the first publication of this nature in the United States.

The first issue of the monthly **Health Bulletin** appeared in April 1886 and contained reports from 26 counties, with tables made up from the reports of county superintendents of health giving the conditions of weather, the prevailing diseases, epidemics, diseases of domestic animals and the condition of public institutions, especially of the jails and poorhouses. The reports of the latter included, among other things, the number of inmates, the number who had been successfully vaccinated, the kind and the amount of food, the number who could read and write, and a report of general sanitary conditions existing in the county. Along with these reports were additional articles and editorials to instruct the people in hygienic matters.

The **Bulletin** was widely distributed; being sent to state and county officials, public libraries and to all members of the State Medical Society, to mayors and health officers of cities and towns, and to any citizens who asked for it. It was intended to be, and was, the voice of the State Board of Health. Commenting on the first issue of the **Bulletin,** Dr. Jones, President of the Board, said to the North Carolina Medical Society at its meeting in 1886: "It will go out as a monthly messenger of glad tidings with healing in its wings, with words of truth and notes of cheer, or sounds of alarm if danger comes nigh." During its early years, the **Bulletin** was prepared largely by Dr. Wood who alone decided what should be printed. Also, the wrapping and mailing of the periodical was done by the Doctor and his family. Miss Jane Wood has told of how she and her brother (later to become Dr. Edward Jenner Wood) helped their father with this work. She writes, "We grew to be very proud of the part we had in making good health a part of the State's task."*

The favorable reception the **Bulletin** received and its success were due largely to the reports of the county superintendents. These showed something of the health conditions existing in the different counties and enabled interested officials and citizens to compare their county with others. At first, the county superintendents were negligent in sending in their reports, but in 1893 reports were received from 88 of the 96 counties in the State. Since seven counties had no board of health, only one county had failed to report. During the first eight years, up to 1893, the **Bulletin** became an indicator of the progress being made in public health work in the State. Its articles were republished and commented upon in the state press.

W. S. Rankin, M.D. 1909-1925

The Act of 1893 greatly increased the status of the State Board of Health, which reacted with renewed activity. A well-equipped office was established in Raleigh for the Secretary who was given an annual salary of $1,000.

When Dr. Thomas F. Wood of Wilmington, the founder and first secretary of the State Board of Health, died on August 22, 1892, Dr. Lewis was elected to succeed him. Since the State Board of Health's annual appropriation up to 1907 was never more than $2000, the Board could not afford an office of its own, and most of its work was carried on in his office.

The Act of the General Assembly of 1909 providing for the employment of a State Health Officer for his whole time made it necessary for Dr. Richard H. Lewis, the father of the bill, to culminate 17 years of patriotic devotion to the health of the people of North Carolina. At a called meeting of the Board of Health on March 30, 1909, he explained the amended law, stating that he could not afford to surrender his practice and was therefore tendering his resignation. The Board, after insisting in vain for the withdrawal of the resignation, reluctantly accepted it. Dr. Watson Smith Rankin of Wake Forest was elected to succeed him on July 1, 1909, at a salary of $3,000 per year.

The annual appropriation of the Board was increased from $4000 to $10,500 in 1909.

The General Assembly of 1911 created County Boards of Health to take the place of the Sanitary Committees.

The new legislation in 1911 enabled the State Board of Health to increase the circulation of the **Bulletin** from 11,500 to 20,000 copies per month.

The General Assembly of 1913 also amended several sections of the existing health laws and raised the annual appropriation of the Board from $22,500 to $40,500 annually.

In 1916 the monthly circulation of the **Health Bulletin** reached 51,000.

Early in 1923, Dr. W. S. Rankin was invited by the "Committee of Municipal Health Department Practices" of the American Public Health Association to become Field Director in making a study of municipal health procedures.

The Executive Committee of the State Board of Health granted the Secretary a year's leave of absence, and on November 1, Dr. Rankin assumed his duties and established official headquarters in New York City. He continued this work until November 1, 1924.

A number of changes were made in 1923 in the organization of the State Board of Health as well as in its personnel. On March 1, Dr. Cooper made Assistant Secretary and became official head of the staff. If it had not been for his almost total deafness, he undoubtedly would have been selected to succeed Dr. Ranklin when the latter resigned a short time later.

At the Conjoint Session of the State Board of Health and State Medical Society held in Pinehurst on April 29, 1925, Dr. Rankin announced his resignation as State Health Officer, effective June 1, to accept directorship of the Hospital and Orphan Division of the newly created Duke Endowment. On May 30, at the meeting of the Executive Committee of the Board, Dr. G. M. Cooper was unanimously made Assistant Secretary for an indefinite period of time.

During his public health career, Dr. Rankin had been President of the American Public Health Association; Trustee of the American Hospital Association; first Chairman of the Charlotte Board of Health; Member of the North Carolina Medical Care Commission; Trustee of Wake Forest College; and he received honorary degrees from Duke University, University of North Caro-

Chas. O'H. Laughinghouse, M.D. 1926-1930

lina, Davidson College, and Wake Forest College. He also received, in 1956, the Distinguished Citizenship Award from the North Carolina Citizens Association.

The City of Charlotte named their new public health building the "W. S. Ranklin Health Center" and this was dedicated on Dr. Rankin's 81st birthday, January 18, 1960.

Along with the founders of the State Board of Health, Drs. Thomas Fanning Wood and Richard Henry Lewis and Dr. W. S. Rankin, first full-time secretary, three doctors stand out in the development of public health work in North Carolina; Dr. John A. Ferrell, Director of the North Carolina Hookworm Commission, 1910-14, extended educational and treatment campaigns throughout the State and later directed work which hastened the advent of county health departments; Dr. Louis B. McBrayer who directed and developed activities which brought about the control of tuberculosis; and Dr. George Marion Cooper who may be called the "family physician" of the State because of his careful study of health and social ills and the modern methods he devised to alleviate them.

On May 1, 1923, Dr. Cooper was appointed Assistant State Health Officer and was made Editor of the **Health Bulletin.** He continued as Editor of the **Bulletin** until 1942 and was Acting State Health Officer on four different occasions. In the reorganization plan of 1950, Dr. Cooper became Director of the Division of Personal Health.

Highlights of Progress To 1967

Excerpts from Biennial Reports

1926. **On June 21 Dr. Charles O'H. Laughinghouse, a member of the Board, was elected permanent Secretary and State Health Officer to fill the unexpired term of Dr. Rankin. Dr. Laughinghouse accepted and took office October 1.**

1928. The educational work of the Board was of a high order during 1928. A thirty-two page BULLETIN was issued monthly, and a moving picture machine with several films on modern health subjects was exhibited in many sections of the state.

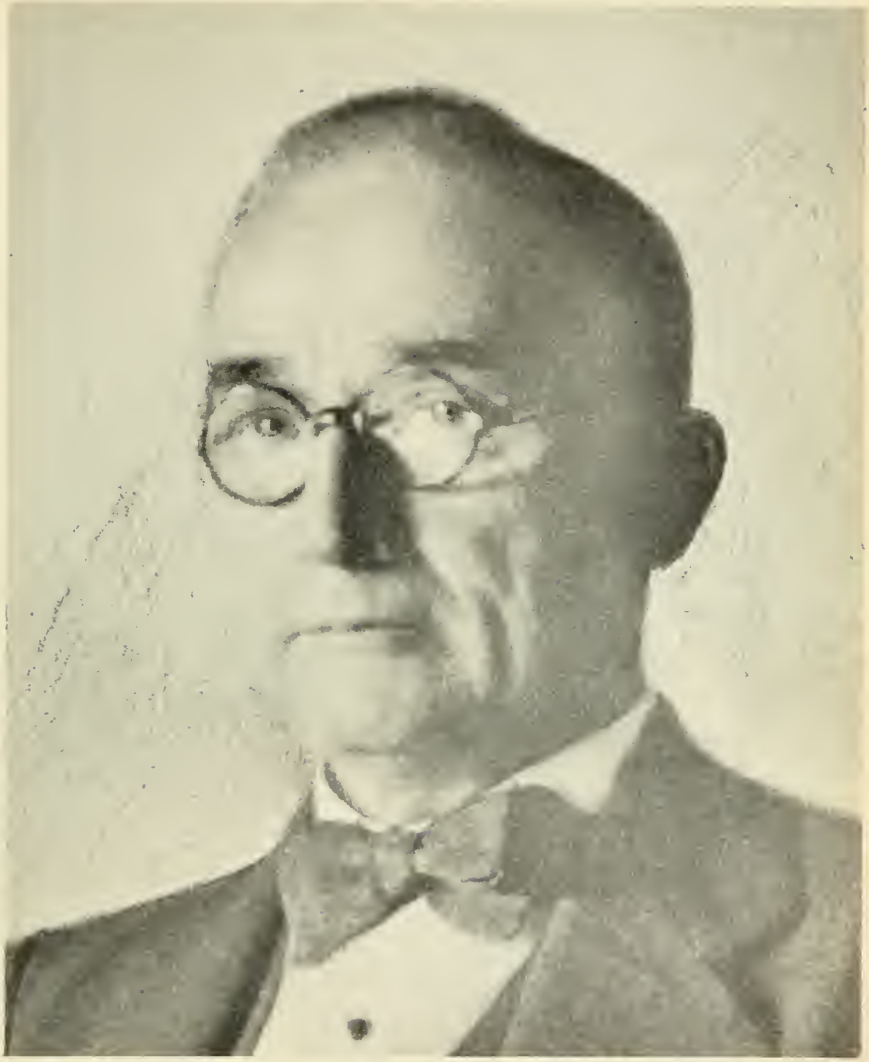
1929. On January 1 Dr. Earnest A. Branch accepted the appointment as director of the Division of Oral Hygiene.

Expenditures for the Board work this year reached the highest peak in the history of the Board, totaling about $486,000.

1930. On August 26, Dr. Chas. O'H. Laughinghouse, State Health Officer, died. Soon after his death, in a meeting of the board, Dr. H. A. Taylor was made Acting State Health Officer.

1931. **A bill was introduced in the Legislature abolishing the State Board of Health as then constituted.** This bill was passed and became law during the session of 1931. With the enactment of the new law the terms of the members of the old Board were automatically terminated. Under this new law governing the state health work, legislative machinery providing for the establishment of a new organization to carry on the public health work of the state was enacted.

The Board still elects the State Health Officer, but it can only become effective upon the approval of the Governor. The term of the State Health Officer, along



James M. Parrott, M.D. 1931-1934

with members of the Board of Health, was restricted to four years.

On May 28, the new Board met and organized. On that day it unanimously elected Dr. James M. Parrott State Health Officer. Dr. Parrott took the offer under consideration for a period of two weeks. On June 11 the Board met again. Dr. Parrott accepted the election and agreed to assume office on July 1.

1932. The death rate in North Carolina for 1932 was 9.6 per 1,000 population. This is the lowest death rate ever before recorded in North Carolina.

The infant mortality this year was 66.4 per 1,000 live births. This is so far the best record the state has ever made.

Expenditures for this year for all purposes by the Board were $315,276, of which $262,438 represented appropriations. This amount was just a little more than half the total expenditures made by the Board of Health for the fiscal year ending June 30, 1930.

1933. The event of outstanding importance to the Board of Health this year was the death of Dr. C. A. Shore, which occurred on February 10.

A few weeks after the death of Doctor Shore, Dr. John H. Hamilton, director of County Health Work, of Vital Statistics, and of Epidemiology, was made director of the laboratory work.

1934. **The event of greatest importance to the State Board of Health and to the health work throughout the state in this year was the death of Dr. James M. Parrott and the election of Dr. Carl V. Reynolds as his successor.**

Dr. Carl Vernon Reynolds, of Asheville, on November 10, took the oath of office and immediately assumed his duties as Acting State Health Officer.

1935. At the annual meeting of the State Board of Health, which was held in Pinehurst May 7, 1935, Dr. Reynolds was unanimously elected State Health Officer.

1937. **On December 16, 1937, following Legislative Provision in the 1937 session of the Legislature, $160,000 in bonds were sold for the purpose of building a new plant for the State Laboratory on the grounds adjacent to the present State Board of Health building on Caswell Square, Raleigh.**

The total expenditures for the State Board of Health during the fiscal year ending June 30, 1937, were $881,484.01. Of this amount $287,747.04 was appropriated by the Legislature.

The total expenditures for the State Board of Health for the fiscal year ending June 30, 1938, were $1,041,895.98. Of this amount $353,953.55 was appropriated by the Legislature.

1939. **The total expenditures for the State Board of Health for the fiscal year ending June 30, 1939, were $1,215,056.80. Of this amount $364,506.25 was appropriated by the Legislature.**

1940. The most important item in the field of public health in this State in 1940 was the completion and dedication of the central building known as the Clarence A. Shore Laboratory of Hygiene.

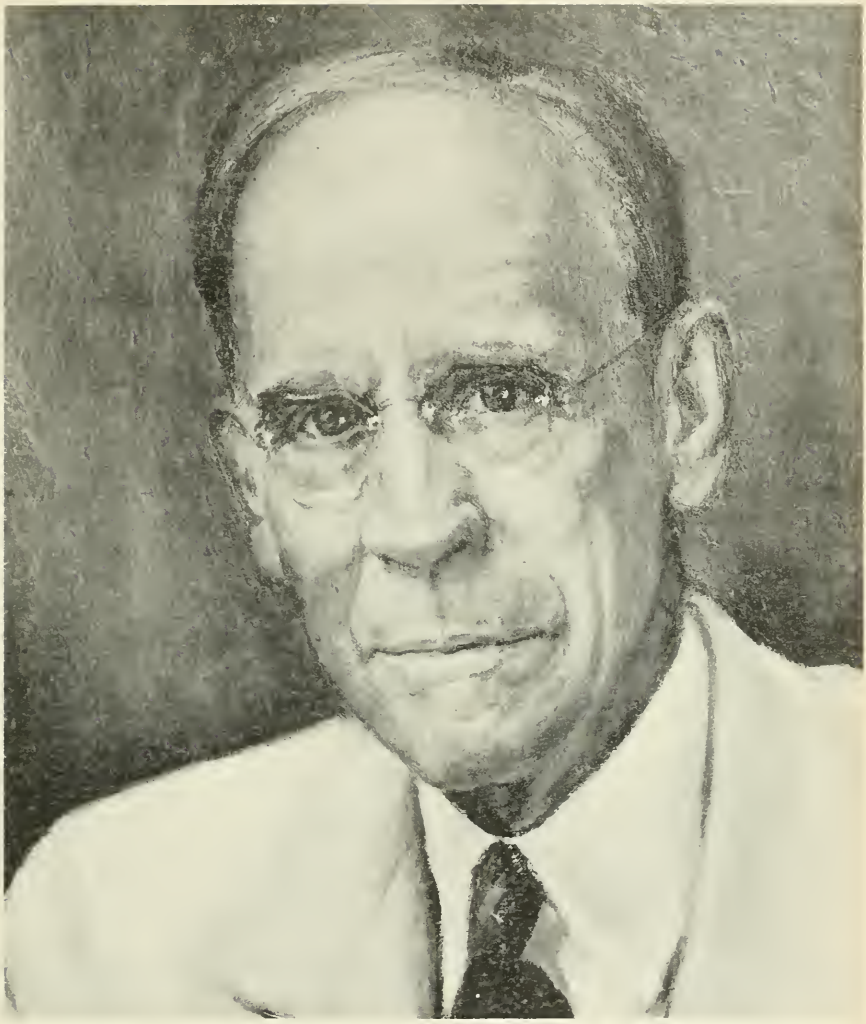
The circulation of the HEALTH BULLETIN increased from about 52,000 to 60,000 monthly copies during the year.

The total expenditures for the State Board of Health for the fiscal year ending June 30, 1940, were $1,380,174.90. Of this amount $370,057.67 was appropriated by the Legislature.

1942. **On January 1, 1942, Dr. G. M. Cooper was retired from the editorship of the State HEALTH BULLETIN and Dr. John H. Hamilton assumed the duties of acting editor.**

The total expenditures for the State Board of Health for the year ending June 30, 1942, were $1,791,878.11. Of this amount $370,150.59 was appropriated by the Legislature.

In the autumn of this year the employees of the State Board of Health organized and established what is officially known as the North Carolina Academy of Public Health at the State Board of Health. All employees of the State Board of Health are members of this Academy.



Carl V. Reynolds, M.D. 1934-1948

The total expenditures for the State Board of Health for the year ending June 30, 1942, were $1,791,878.11. Of this amount $370,150.59 was appropriated by the Legislature.

1943. The total expenditures for the State Board of Health for the fiscal year ending June 30, 1943, were $1,880,230.62. Of this amount $406,993.29 was appropriated by the Legislature.

1947. The total expenditures for the State Board of Health for the year ending June 30, 1947, were $2,814,937.00. Of this amount $561,996.00 was appro-

priated by the Legislature.

1948. **The most conspicuous event taking place during this part of the biennium was the resignation of Dr. Carl V. Reynolds as State Health Officer effective June 30. Dr. Reynolds retired after serving a little more than 13½ years.**

At the meeting of the State Board of Health in Raleigh on February 24, President Craig read Dr. Reynold's letter of resignation as Secretary and State Health Officer effective June 30, 1948.

Doctor J. W. R. Norton, native of Scotland County and Chief Health Officer of the TVA of Chattanooga, Tennessee, was elected State Health Officer.

The total expenditures for the State Board of Health for the year ended June 30, 1948, were $2,648,277.00. Of this amount $794,774.00 was appropriated by the Legislature.

On July 1, 1948, Dr. J. W. R. Norton assumed his duties as State Health officer.

1949. **The year 1949 was destined to become a turning point in the Public Health program in North Carolina. The Legislature of that year did more for Public Health than any of its predecessors. There was a spirit of close cooperation between Public Health officials, the Governor and members of the General Assembly. As an outcome of this, approximately $800,000 in new money was voted for each fiscal year of the new biennium for local health work, which had only been receiving $350,000 a year. This meant an increase to $1,150,000 in State funds for local health during the biennium.**

1950. The year 1950 saw not only increased expansion in local health work, but also re-organization of the State Health Department so as to make operations less cumbersome. As of February 1, reduced the number of divisions to six, placed in charge of a director and designated the subdivisions as sections.

1951. The General Assembly, which met early in January, increased the appropriations for Public Health to $2,214,591 for the fiscal year of 1950-1952 and $2,224,982 for the fiscal year of 1952-1953.

On January 19, the State Board of Health confirmed the appointment of Dr. John H. Hamilton as Assistant State Health Officer, his term to run concurrently with that of Dr. Norton.

J. W. R. Norton, M.D., M.P.H. 1948-1965

THE HEALTH BULLETIN
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1954. **Following the 1954 Conjoint Session of the State Board of Health and the State Medical Society the health department was moved from its old building to its new million dollar headquarters on Caswell Square.**

Jacob Koomen, Jr., M.D., M.P.H., assistant director of the Division of Epidemiology, was named Assistant State Health Director to begin that service October 1, 1961. The auditorium of the Laboratory Building was renovated and redecorated and dedicated by the State Board as "The John Homer Hamilton Auditorium".

Edwin S. Preston, M.A., LL.D., was named Editor of The HEALTH BULLETIN in May 1960 upon the retirement of Dr. John Homer Hamilton.

Dr. J. W. R. Norton relinquished his position as State Health Director effective December 31, 1965, continuing as Director of the Local Health Division.

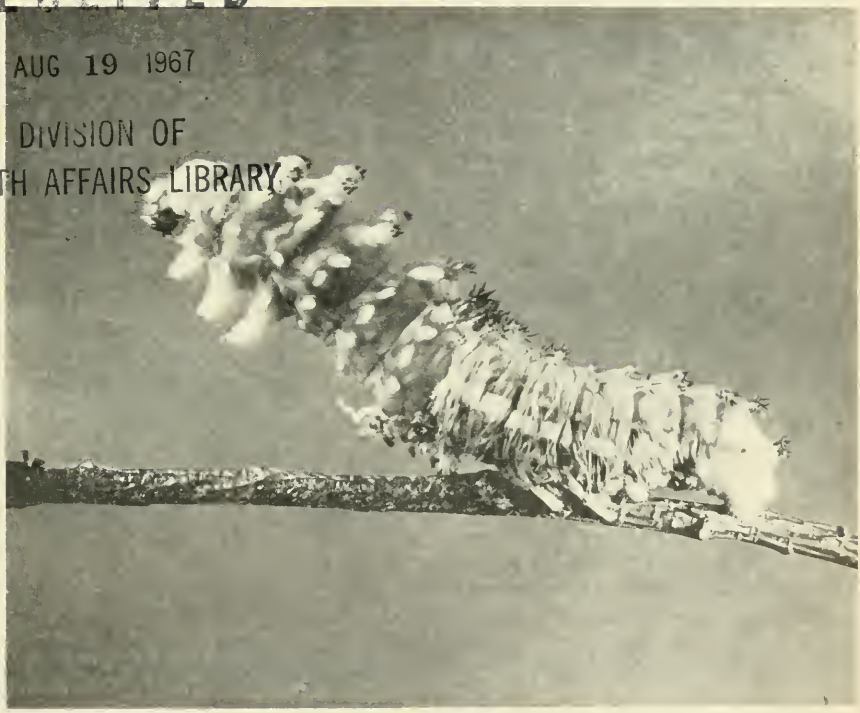
Dr. Jacob Koomen, Assistant State Health Director was elected Acting State Health Director and in May 1966 became State Health Director with the approval of Governor Dan Moore. Dr. W. Burns Jones was elected as Assistant State Health Director.

Appropriations for the continuation of existing activities of the State Board of Health were made in the amount of $6,232,867 for the first year of the biennium, 1967-69, and $6,308,776 for the second year, including amounts to implement a uniform fee schedule for medical fees and the payment of 90% of hospital reimbursable costs.

Additional appropriations for special purposes included: Health aid to counties—$400,000 for each year of the biennium (the first major appropriation for this purpose since 1949); Salt Marsh Mosquito Control—$70,000 for the first year and $100,000 for the second; Genetics Counseling Center—$100,000 for the second year; Scallop Inspection Program—$11,736 for each year; and $42,500 for each year to establish and maintain a Statewide Medical Examiner System.

THE HEALTH BULLETIN

The Official Publication Of The North Carolina State Board of Health



A CUTE RASCAL — BUT AN ENEMY

In the article beginning on page 3, "The Insecticide That Turns the Bug Against Itself", this advice is given: To cope with him and others like him, use the Judo approach — don't whack away by main force; use the enemy's own strength against him. Disorganize the insect's growth by making use of the same chemicals the insect uses to regulate his growth.

Miss Holley Receives Award

The first nurse to receive an Award of Merit for Outstanding Contribution and Meritorious Service in the field of Public Health and Preventive Medicine was presented to Miss Elizabeth Holley, Chief Nurse, North Carolina State Board of Health, Raleigh, North Carolina at the 35th Annual Meeting of the Southern Branch, American Public Health Association held in St. Louis, Missouri last week.

Miss Holley, a past president of the Association and representative to the national A.P.H.A., was selected from among the 17,000 public health workers in 17 Southern states served by the Association which has its headquarters in Birmingham, Ala

In presenting the award, Dr. H. P. Hopkins, President, Nashville, Tenn., said "Miss Holley symbolizes the dedication of the public health nurse and other public health workres in protecting the health of our nation through programs that prevent and control disease affecting people in every age group."

Also elected were: President—Charles G. Jordan, B.S.C.E., Miami, Fla.; 1st Vice President—Hugh B. Cottrell, M.D., Atlanta, Ga.; 2nd Vice President—John M. Bruce, M.D., New Orleans, La.; 3rd Vice President—Fred Ragland, Jacksonville, Fla.; Secretary-Treasurer—John S. Neill, M.D., Tampa, Fla.

Executive Committee—Miss E. Alice Clark, R.N., M.P.H., Atlanta, Ga.; Miss Elizabeth Holley, R.N., M.A., Raleigh, N. C.; H. P. Hopkins, Ph.D., Nashville, Tennessee; William J. Peeples, M.D., Baltimore, Md.; Miss Joella Sisler, Frankfort, Kentucky.

Future annual meetings are scheduled for May 28-31, 1968—Roanoke, Va., and May 20-23, 1969—Oklahoma City, Okla.

The Health Bulletin

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The Insecticide That Turns The Bug Against Itself

by Isaac Asimov

In his campaign against the undesirables of the insect world, man has produced an impressive array of chemicals and pesticides. Yet our tactics fall far short of total victory; insects have a way of building up resistance to chemical warfare, and what worked last year may be useless today. But ultimate victory may be at hand in the special strategy developed by a Harvard biologist.

The search for new insecticides seems virtually endless; man and bug appear to be on a nonstop merry-go-round of chemical attack and genetic defense. The reason is clear. There are always some insects with natural resistance to a particular insecticide. These flourish and produce young by the millions, while their weaker kinfolk die. In a few years, the hardy breeds are almost unaffected by a spray that had earlier seemed an angel of death.

Man's attack moreover, is a double-edged sword. What kills undesirable insects may also kill desirable ones—or may be poisonous to birds, livestock, even man himself. What we really need is an ideal bug-stopper, one that kills insects without affecting other forms of life. Better yet, we need one that kills particular, undesirable insects without affecting others. To top that, we need one to which the undesirables cannot become resistant.

This is asking a good deal. But actually, something of the sort has already been found. It has been developed by Dr. Carroll Williams, a professor of biology at Harvard who has been studying insects for almost thirty years. And while Dr. Williams' material is not yet available commercially, the necessary negotiations are under way between the chemical industry, the Federal Government and the scientists in question.

Although Dr. Williams' object is to kill insects, he is clearly fond of those he works with. When he shows a visitor a jar of crawling bugs, his craggy, high-cheekboned face lights up and his deepset eyes sparkle. "Look at them," he says, "They're cute rascals." But he knows which side he's on. Cute those rascals may be, but they are his enemies. To cope with them, he has adopted the judo approach: don't whack away by main force; use the enemy's own strength against him. Since the insect uses certain chemicals within

Life Cycle of Cecropia Moth

Bottom to top of this page and on the opposite page

Life cycle of Cecropia moth, the object of Dr. Williams' earlier experiments, is shown in sequence, left bottom to top right of this page. It begins with an egg, which then hatches into a caterpillar. After a long period of growth and skin-shedding, it becomes a motionless pupa inside the cocoon, and finally emerges as full grown moth, as shown on the opposite page.

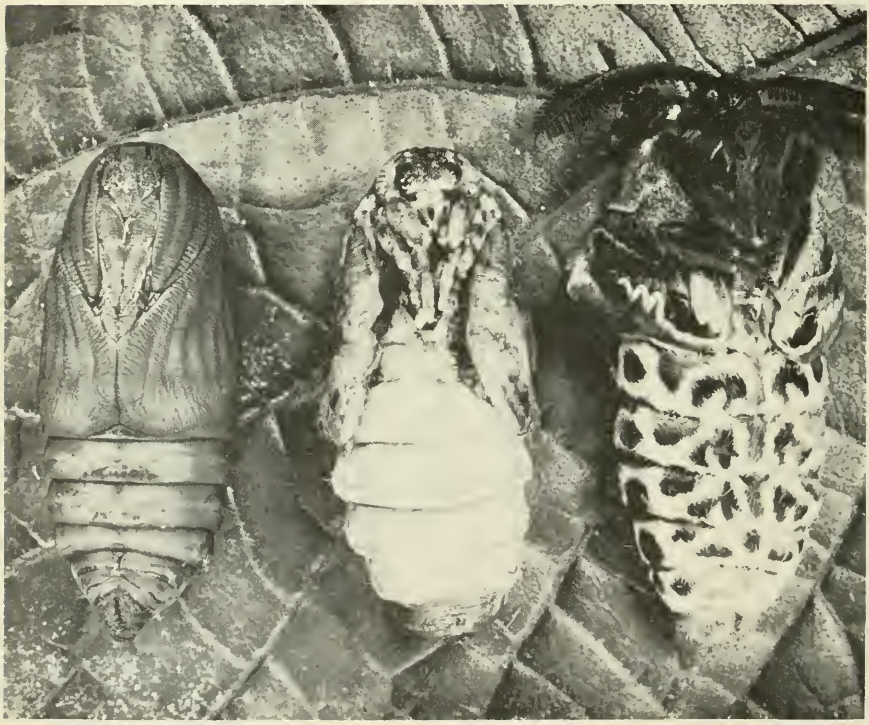
its body to regulate its growth, make use of those same chemicals to disorganize that growth.

To understand this, let's first list some basic facts about insects. Virtually every kind of insect passes through several stages of life. A moth lays an egg which hatches into a caterpillar which, after a long period of caterpillar growth, turns into a motionless object inside a cocoon, and only after that becomes the familiar flying creature we call a moth.

The caterpillar is an example of a "larva." The object in the cocoon is a "pupa." The moth is the "adult," and only this final stage is able to reproduce. In less-advanced insects there is no pupa, and the larva changes directly into an adult.

The change from one stage to another is tightly controlled. A larva will shed its skin a certain number of times, grow to a certain size in doing so, then change into a pupa at a fixed point in that growth. After the lapse of a certain fixed time, it will change further, to an adult.

In 1936, an English investigator, V. B. Wigglesworth, found he could interfere with the fixity of this pattern by a very unexpected operation. He had



Three separate specimens placed side by side illustrate the normal process of change that takes place within the cocoon, from pupa, far left, into adult.

been following a course of investigation that had led him to cut the head off a larva of a disease-spreading, blood-sucking bug called Rhodnius. It promptly underwent a change into an adult. The larva was nowhere near ready for such a change; it was far too small. Yet it did change, and a miniature adult was produced.

Wigglesworth reasoned that the head must produce a certain chemical which kept the larva from changing to the next stage. At some appropriate time the chemical was no longer produced and the larva changed over into an adult. By cutting off the head he had prematurely cut off the supply, and the change took place then and there.

The chemical which kept the insect in its juvenile stage—as a larva—Wigglesworth named "juvenile hormone." He also located tiny glands, barely visible without a microscope, behind the brain of the larva, and these, Wigglesworth suggested, produced the hormone.

What Wigglesworth found to be true of Rhodnius was true of other insects, of the silkworm caterpillar in its larval stage, for instance. Indeed, it is apparently true for all insects.

Meanwhile, in 1938, French biologist Jean Bounhiol had worked out a delicate technique for removing the tiny

Four separate specimens show how the pupa, when treated with the juvenile hormone, fails to undergo change, and instead undergoes fatal growth in size.

hormone-producing glands from one larva and transfering them to another. In one experiment he transferred the glands from a small silkworm larva to another larger larva which was just about ready to begin to change to pupa. By supplying the large larva with new juvenile hormone in this manner, he kept it a larva through additional growth stages. A larger-than-normal larva was produced, later a larger-than-normal pupa, and finally an extra-large adult moth.

The Golden Oil

Now Carroll Williams enters the scene. After graduating from the University of Richmond in 1937 he went north to Harvard where he obtained his Ph.D. in 1941, with work on the mechanics of insect flight; then he went on to get his M.D. at Harvard while continuing to probe the minuscule world of the insect.

In 1948 he hit on the idea of transferring hormone-producing glands, not to another larva, but to the pupa of a silkworm. Ordinarily, a pupa has no juvenile hormone. But now, when the active glands were implanted, the pupa passed only incompletely into the adult stage, and then invariably died. The importance of the discovery was that it provided a simple test for juvenile hormone. By means of this test, Williams found that the adult male Cecropia moth, for some strange reason, stored large quantities of the juvenile hormone in its abdomen. In 1955, he used these abdomens to produce the first active extract in the form of a golden oil and found that he did not even have to inject it. If some were merely applied to the unbroken skin, enough hormone leaked inside to upset the chemistry of the creature. Development was so disordered that the insect died without ever changing into the adult form or becoming sexually mature.

The thought occurred to Williams that here was a potential insecticide—an agent that turned the insect's own chemistry against itself. And since an insect could scarcely become resistant to its own hormones without killing itself, it should remain forever vulnerable. Furthermore, the juvenile hormone was found to have no effect whatever—as far as can be detected—on any form of life other than insects. It was something that ages of evolution had designed specifically for insects and nothing else.

It would be helpful, of course, if one knew the exact structure of the compound within the golden oil that served to kill the pupae, but that structure was not known (back in 1956). Williams reasoned that once the formula was known, it would be possible to synthesize the hormone and make it available in the quantities necessary to make it a practical insecticide.*

One summer day in 1962, Williams and his colleague, John Law, sat in their Harvard laboratory, wondering if they could reason out what the structure **might** be, in order to synthesize vaious compounds of the sort on the off-chance that one might work. Prompted by a joking remark of a lab assistant, Law recalled that a chemical called "farnesol" had a faint trace of juvenile hormone activity, and he decided to try to manufacture a compound called ethyl farnesoate. It was a long shot, and he wasn't going to invest too much effort, so he used the simplest possible method for forming it. He soon produced an oily solution of a mixture of compounds which Williams tested by injection into silkworm pupae.

It worked—it worked unbelievably well!

***Curiously enough, as this article goes to press, the formula of the hormone has just been announced by a team of investigators headed by Dr. Herbert Roeller of the University of Wisconsin.**

The mixture was no less than one hundred thousand times more powerful than the crude extract from Cecropia abdomens. It is estimated that an ounce of Law's synthetic preparation would kill all insects at the sensitive stage over an area of 2½ acres.

The crude "synthetic juvenile hormone" contains at least six different active substances. The structure of one of these was recently determined by a team of scientists headed by Dr. F. Sorm, president of the Czechoslovakia Academy of Sciences; it proves to be a substance called methyl dehydrochlorofarnesoate. The synthetic is not identical in structure with the natural juvenile hormone, but both are relatively simple terpenoid acid esters that should be easy to synthesize.

There are disadvantages to an insecticide that kills all kinds of insects. Some insects are harmless; some are beneficial. Besides, the more wholesale the killing, the more likely the chance of adversely altering the balance of nature. But to zero in on one kind of pest would require different forms of juvenile hormone, with each group of insects susceptible to its own. Were there such different forms?

Williams learned of Czech experimenter Karel Sláma, who was trying to make juvenile hormone work on the "red linden bug," a harmless creature which bears the scientific name of "Pyrrhocoris apterus." The juvenile hormone technique wouldn't work with the red linden bug. Was its chemistry different in some way? Could that difference be made to yield useful results?

In the summer of 1965, Williams invited Slàma to bring his red linden bugs to Harvard so they could perform the experiment together. Back in Prague, Slàma had grown these creatures by the tens of thousands, and their mode of growth was always the same: the larvae shed their skin five times and then transformed into the adult bug. Yet at Harvard this did not happen. Bug after bug went through the fifth skin-shedding without becoming an adult. Some even went through a sixth skin-shedding and with the same result. Sooner or later, each and every one died without being able to finish the job. Altogether, about 1,500 insects died in the Harvard laboratories whereas none had died in Prague.

Why? It was as though the bugs had received a dose of juvenile hormone and couldn't stop being larvae—but no juvenile hormone had been given them.

The Paper Factor

Could some hormone effect have leaked across as a vapor from other insects? **Remove those insects.**

Could the glassware have been contaminated during cleaning? **Get new glassware that had never been used.**

Could Cambridge be doing something to its water supply? **City officials said no, but get spring water anyway.**

Fourteen possibilities were raised and all fourteen were checked out.

What else in Cambridge differed from conditions in Prague? One more thing, and one only.

Strips of paper had been placed in the jars with the red linden bugs. The strips were slanted against the sides as a promenade for the bugs—a place to walk seemed to keep them happier. And, of course the paper used in Cambridge was not the same as the paper used in Prague. Williams was, in fact, using strips of ordinary paper towels produced by an American manufacturer.

Could it be? **Substitute strips of chemically pure filter paper.**

That accomplished, the bugs stopped dying. So there was something in the paper towels that acted like a juvenile hormone and fatally upset the chemi-

cal machinery of the larvae. In default of any better name, Williams and Slàma called it the "paper factor."

Feverishly, they began to try all kinds of paper. They found that almost any American product had the factor. The New York **Times** had it. So had the Boston **Globe, Science, Scientific American, Time, Life** and the **Wall Street Journal**. Larvae that crawled over them never made it to the adult stage. On the other hand, paper from Great Britain, the European continent or Japan did not have the factor. This is why the bugs could live in Prague.

Williams telephoned paper manufacturers: What were they adding to their paper? Nothing but paper pulp, they said. So attention turned to the kinds of trees used for pulping—trees native to North America, but not Europe or Asia. Analysis proved that a favorite American Christmas tree, the balsam fir, was full of the paper factor, which could easily be extracted in quantity.

And here is an interesting point. The paper factor works on only **one** family of insects, the pyrrhocorids, the group to which the red linden bug happens to belong. Had Slàma brought with him an insect from any other family, even those most closely related to the pyrrhocorids, the paper factor would have gone undiscovered.

Tight-beam Insecticide

The paper factor is an example of a tight-beam insecticide, one that narrows the aim down to a single family of insects and is totally harmless to any other form, or to anything that is not an insect. The red linden bug may be harmless, but the red cotton bug, the bane of India's cotton crop, is **also** a pyrrhocorid. Williams sent extracts of paper factor to K. N. Saxena at the University of Delhi, who found that it works! The possible effect on India's economy, when this tightly-selective poison is brought to bear on its cotton

MAN'S LONGEST WAR has been a succession of defeats at the hands of an enemy he often regards as a minor nuisance. and yet . . .

Every crop of food or fiber is prey to an insect pest that levies a deadly tax of destruction.

Much of India's cotton crop is destroyed each year by the red cotton bug.

Losses to the boll weevil add 3 cents to the price of every pound of cotton in the United States.

Every domestic animal has its insect tormentor.

Nor is man himself free of direct harm. In 1965, mosquitoes infected 100 million people with malaria and killed 900,000.

Until very recent times, man was a helpless victim in this quiet war, with no defense against the starvation that followed a plague of locusts or the deadly sting of an insect. Now he is counterattacking, and sparing no expense. In 1966, the United States spent $1,100,000,000 for pesticides; this year, the cost is expected to rise an additional $100 million.

Yet the expense is certainly warranted. After World War I, millions of East Europeans died in typhus epidemics spread by the bite of the body louse. After World War II, typhus was stopped in its tracks in Italy and Japan, thanks to DDT.

Malaria is being conquered, too. The number of cases and deaths has dropped steeply since 1955. In the southern United States alone, where it was once widespread, there are less than a hundred cases a year, and most of these are brought in from abroad.

fields is enormous. (The American boll weevil, alas, is **not** a pyrrhocorid.)

Catching insects at the end of their larval state is better than nothing, but it is certainly not as good as everything. The larva before dying has already done much eating, and all the larvae put together consume a great deal. Any larvae that happen to survive can become adults that lay vast numbers of eggs, and again the larvae that form can only be stopped after a period of steady devouring.

Can insects be caught at the beginning of the larval stage rather than at the end? In 1965, Williams and Slàma placed eggs of pyrrhocorid insects on paper containing the paper factor. If the eggs were newly laid, they did not hatch! But the eggs had to be fresh. If they had been incubated for several days, they remained unaffected and were killed only later in the larval stage.

Suppose, then, that the eggs were exposed before they were even laid. In short, suppose the paper factor were applied to the skin of adult female pyrrhocorids?

The factor was so applied—and worked. Apparently it gets into the female's egg-laying machinery, for the eggs wouldn't hatch.

Now the paper factor was more valuable than ever, for it could be used to catch pyrrhocorid bugs at the very beginning of their life. Synthetic juvenile hormone was found to do the same job on other kinds of insects.

Victory in Sight

It is possible, then, to find or synthetize cheap and plentiful substances that kill any insect at some sensitive stage; and others that kill only certain particular insects; and in both cases without harming any non-insects at all. Since these bug-stoppers make use of the insects' own chemical machinery, the insects cannot grow resistant to them.

Ultimately, it can be hoped, scientists will find a whole spectrum of substances each effective for some one group of insect. The exterminator can then merely decide which kind of insect is giving trouble and select the particular spray that will hit it and nothing else.

If this comes to pass, and it well might, man will have won his long war against the insects. He will have won it, moreover, without any further danger of poisoning himself and the world in the process.

Amendments were adopted on December 13, 1966 by the North Carolina State Board of Health concerning protection against radiation. These amendments had been previously approved by Governor Dan Moore. They are published as a supplement to the HEALTH BULLETIN and legal requirements have been met by the depositing of certified copy.

Individual copies of this supplement to the HEALTH BULLETIN may be secured from the Radiation Protection Section of the State Board of Health, P. O. Box 2091, Raleigh, N. C., 27602.

New evidence in support of a genetic factor in schizophrenia has been reported by a U. S. Public Health Service scientist.

Children with two schizophrenic parents show a strikingly higher risk rate for development of the disease than the general population and than children with one schizophrenic parent.

Dr. David Rosenthal, Chief of the Laboratory of Psychology, National Institute of Mental Health, made the finding in analyzing five studies of children with both parents who were schizophrenic.

The Western Carolina Public Health Meeting

Some Candid Shots

Progress In Venereal Disease Control In North Carolina

Script from a recent broadcast over WPTF (Raleigh)

This is Edwin S. Preston of the North Carolina State Board of Health. Our guest this morning is Mr. Joe Wray Martin, Chief of the Venereal Disease Control Section of the State Board of Health.

Question: 1. As far as venereal disease is concerned — what is the situation in North Carolina?

Answer: During 1966 VD accounted for 77% of all communicable disease reported in North Carolina.

Gonorrhea ranked No. 1 with 12,944 cases being reported. Syphilis ranked second with 2,025 cases being reported. The 12,944 cases of Gonorrhea reported in 1966 represented an increase of 1,087 cases more than were reported in 1965. However, the trend for reported Syphilis is going down. In 1965 there were 1,138 cases of infectious Syphilis reported in North Carolina. In 1966 the number dropped to 923 — over 200 less than the previous year.

Question: 2. You mentioned that Gonorrhea and Syphilis are the two principal venereal diseases you are seeking to control. Is the **Gonorrhea problem** different from the control problem of Syphilis?

Answer: Yes, Gonorrhea presents different problems as far as control is concerned.

Fortunately there is treatment for Gonorrhea, but methods for case prevention and casefinding are limited.

The nature of the disease, short incubation period — a few days, females who are infected with Gonorrhea are often not aware they are infected, and once a female becomes infected she may be infectious over a long period of time if not adequately treated.

There is no simple screening technique like a blood test to find cases.

The main control is treatment. Research is being done to develop casefinding methods.

We will be fortunate to hold the line with the spread of Gonorrhea until research provides better tools.

Question: 3. As far as reducing the incidence of Gonorrhea we do not have the tools, today? Therefore, you and your staff concentrate your efforts on Syphilis control. Just what plan of action does your staff use?

Answer: First, there is no vaccine against Syphilis. Our main plan of action is case-prevention through casefinding. Every case of infectious Syphilis that is treated is rendered non-infectious,

thus preventing further spread. So our objective is to find as many infectious cases of Syphilis and as early as possible to prevent spread. There are four basic methods used in Syphilis casefinding.

1. **In Education** — particularly in public schools, grades 7-12, to make everyone aware of the risk of acquiring Syphilis through extra marital exposure, and to make everyone aware of the symptoms and the need to seek medical attention immediately.

Education is to encourage individuals to seek medical attention voluntarily.

2. **Contact Tracing**—Another method of Syphilis casefinding is the process of interviewing every patient who is diagnosed as having infectious syphilis. Every person who is infected had to have acquired the disease from someone else who was also infected.

Referring all sex contacts named by infected patients to medical examination.

More than 50% of all patients reported are found through contact tracing. And each person treated reduces the spread of Syphilis.

3. In addition to Education and Contact Tracing, another casefinding method is that of **screening and follow-up** of positive blood tests for syphilis reports.

4. Reporting by physicians and hospitals are a great help. Through casefinding and treatment of patients during the early stage of their infection we have been able to effect a downward trend.

Question: 4. What hopes do you have for success in controlling Syphilis?
Answer: In my opinion we have the necessary tools today for the eradication of Syphilis.

But to achieve that goal is going to require more VD education in more schools throughout North Carolina, the cooperation and support of all the people in bringing VD out in the open to overcome so it will not continue to be hidden in ignorance.

Our guest this morning was Mr. Joe Wray Martin, Chief of the Venereal Disease Control Section of the State Board of Health.

This is Edwin S. Preston of the North Carolina State Board of Health for WPTF returning you to Monitor and Radio Central.

It's Miami Beach For The APHA In October

Has the quality of the environment passed the point of no return?

A debate on this question will be a feature of the American Public Health Association's 95th annual meeting at the Fontainebleau Hotel, Miami Beach, October 23 through 27.

More than 6,000 public health specialists from this country and abroad are expected to attend the APHA sessions and meetings of more than 60 related organizations.

Comprehensive health planning as related to PL 89-749, current issues in reorganization for delivery of better health services, unresolved issues in Medicare and Medicaid, and the world war on hunger will be covered in major sessions. Health manpower will also be in the spotlight.

Two special sessions on environmental health are scheduled, according to Berwyn F. Mattison, M.D., executive director of the Association with headquarters here. One will be on man-made environmental hazards and what can be done technologically to restore the environment. The other session will be on the maximum social use of land, air and water resources.

Scientific and technical exhibits of interest to public health practitioners will be on view during the meeting beginning on Sunday, October 22, at one o'clock.

Presentation of papers and round-table discussions and workshops on a wide variety of topics of importance to public health practice are being planned by the Association's fifteen specialized sections: dental health, engineering and sanitation, epidemiology, food and nutrition, health officers, laboratory, maternal and child health, medical care, mental health, occupational health, public health education, public health nursing, radiological health, school health and statistics.

Among these topics are evaluation of family planning, child reactions to care during illness, activation of new mental health legislation, health problems of teenage parents, health status of the Negro, prospects for the future in nutrition, respiratory diseases in industry, the use and control of radiation in clinical medicine, mass screening for chronic diseases, health problems in the aerospace industry, dental health of school children, meeting special emotional and physical problems in the schools, the environment of hospitals and other medical care facilities, traffic accidents as a health hazard and mental health services for disadvantaged communities. Also the noise problem and health, laboratory analytical methods in environmental surveillance, environmental epidemiology and comprehensive environmental health planning.

The American Public Health Association is a professional society with more than 17,000 members, including officials of governmental and voluntary health agencies on international, national, state and local levels. Its president is Milton Terris, M.D., professor of preventive medicine at New York Medical College. Chairman of the local arrangements committee for the 1967 annual meeting is T. Elam Cato, M.D., director of the Dade County Department of Public Health, Miami. Co-chairman is Wilson T. Sowder, M.D., Florida State Health Officer.

The Florida Public Health Association will have a combined annual meeting with the Association, and its headquarters will be the Carillon Hotel.

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DATES AND EVENTS

Aug. 7-12 — Laboratory on Community Leadership Development, Lees-McRae College, Banner Elk, N. C.

Aug. 9-13 — Sixth Annual Southwide Lawyers & Physicians' Conference, Lake Junaluska, N. C.

Aug. 13-16 — Association of County Commissioners, Sir Walter Hotel, Raleigh, N. C.

Aug. 15-18 — American Dietetic Association, Chicago, Ill.

Aug. 16-18 — 3rd National Conference on Public Health, Shoreham Hotel, Washington, D. C.

Aug. 18-19 — Seminar on the Coordination of Consultation in Medicare, Myrtle Beach, S. C.

Aug. 19-26 — 3rd Atlanta Regional Laboratory in Community Leadership Development, Stone Mountain Inn, Stone Mountain, Ga.

Aug. — National Dental Association, Los Angeles, Cal.

Aug. 21-24 — American Hospital Association, Chicago, Ill.

Aug. 28-31 — American Hospital Association, Coliseum, New York, N. Y.

Aug. 28-Sept. 1—Annual Dental Health Division Staff Conference, Quail Roost Conference Center, Rougemont, N. C.

Sept. 7-9 — N. C. State Employees Association, Jack Tar Hotel, Durham.

Sept. 14-17 — American Medical Writer's Association, Chicago, Ill.

Sept. 19 — N. C. Health Council, Inc., Board of Directors, Hospital Care Association Board Room, Durham.

Oct. 4-6 — North Carolina Public Health Association, Sir Walter Hotel, Raleigh.

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THE HEALTH BULLETIN

The Official Publication Of The North Carolina State Board of Health

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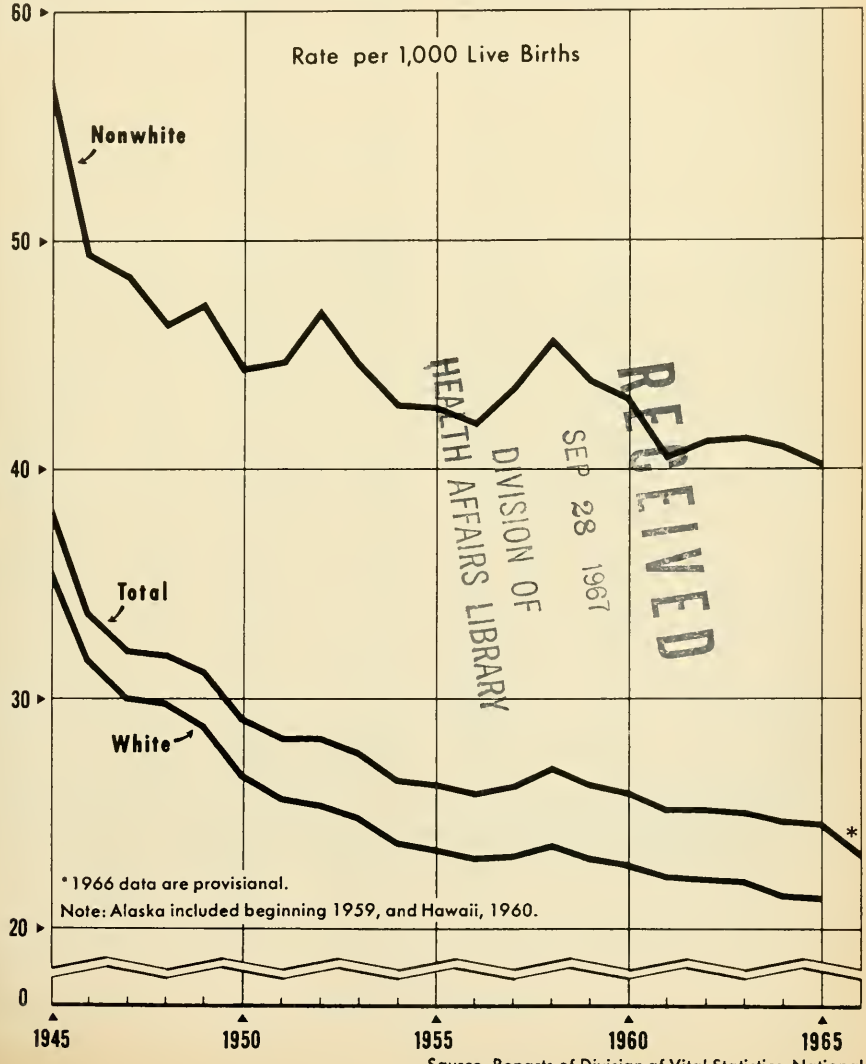
TREND IN INFANT MORTALITY, UNITED STATES, 1945-1966



Source: Reports of Division of Vital Statistics, National Center for Health Statistics.

TABLE 1—INFANT MORTALITY IN THE UNITED STATES, 1963-64 AND 1953-54

Average Annual Death Rates Under One Year of Age per 1,000 Live Births

Area	1963-64			1953-54			Percent Change 1963-64 Since 1953-54		
	Total Persons	White	Nonwhite	Total Persons	White	Nonwhite	Total Persons	White	Nonwhite
UNITED STATES	25.0	21.9*	41.3*	27.2	24.5	43.4	— 8	—11*	— 5*
New England									
Maine	23.8	23.8	23.0†	25.6	25.6	30.1†	— 7	— 7	†
New Hampshire	22.7	22.6	34.5†	23.4	23.5	15.7†	— 3	— 4	†
Vermont	24.7	24.7	31.3†	24.9	24.8	125.0†	— 1	‡	†
Massachusetts	20.2	19.8	30.7	22.6	22.4	31.7	—11	—12	— 3
Rhode Island	24.4	23.3	50.5	24.0	23.4	45.2	+ 2	‡	+12
Connecticut	21.7	20.1	38.2	21.9	21.0	41.4	— 1	— 4	— 8
Middle Atlantic									
New York	24.1	21.1	40.5	24.1	22.4	39.2	0	— 6	+ 3
New Jersey	23.7	*	*	23.5	21.3	42.5	+ 1	*	*
Pennsylvania	23.4	21.3	40.1	25.3	23.5	44.2	— 8	— 9	— 9
East North Central									
Ohio	22.6	21.0	36.3	25.6	24.2	39.5	—12	—13	— 8
Indiana	23.6	22.2	39.7	26.0	24.8	42.9	— 9	—10	— 7
Illinois	24.5	21.2	41.1	25.4	23.1	41.0	— 4	— 8	‡
Michigan	23.1	21.3	38.0	25.4	24.1	36.5	— 9	—12	+ 4
Wisconsin	21.6	21.0	35.8	22.7	22.2	41.0	— 5	— 5	—13
West North Central									
Minnesota	20.7	20.4	29.8	22.5	22.4	31.1	— 8	— 9	— 4
Iowa	20.9	20.5	39.8	21.5	21.3	42.4	— 3	— 4	— 6
Missouri	24.2	21.2	41.9	27.4	24.9	46.1	—12	—15	— 9
North Dakota	23.9	23.1	40.8	25.5	24.7	54.8	— 6	— 6	—26
South Dakota	23.6	21.9	41.4	24.9	23.0	60.3	— 5	— 5	—31
Nebraska	22.2	21.3	37.9	23.8	23.1	44.3	— 7	— 8	—14
Kansas	22.2	21.0	38.6	24.6	23.7	42.5	—10	—11	— 9
South Atlantic									
Delaware	23.1	18.7	40.3	28.7	23.7	51.6	—20	—21	—22
Maryland	25.1	20.9	40.0	27.4	23.2	43.1	— 8	—10	— 7
District of Columbia	33.5	24.0	37.1	29.4	26.0	32.9	+14	— 8	+13
Virginia	28.6	23.4	44.7	31.5	26.1	47.4	— 9	—10	— 6
West Virginia	24.8	24.2	37.7	29.1	28.5	38.4	—15	—15	— 2
North Carolina	30.8	21.9	50.1	31.5	23.4	47.7	— 2	— 6	+ 5
South Carolina	32.1	22.8	45.3	33.7	24.1	46.1	— 5	— 5	— 2
Georgia	30.1	22.5	44.2	31.6	24.2	44.6	— 5	— 7	— 1
Florida	28.4	22.8	43.8	31.1	24.5	48.5	— 9	— 7	—10
East South Central									
Kentucky	26.6	25.0	44.6	31.8	30.6	46.0	—16	—18	— 3
Tennessee	28.1	24.2	42.3	30.3	27.4	41.3	— 7	—12	+ 2
Alabama	31.6	23.8	45.0	33.8	26.7	45.1	— 7	—11	‡
Mississippi	40.4	23.0	55.4	38.2	27.5	46.8	+ 6	—16	+18
West South Central									
Arkansas	27.7	22.9	39.6	28.0	24.5	36.5	— 1	— 7	+ 8
Louisiana	30.1	20.6	44.7	31.5	22.7	45.0	— 4	— 9	— 1
Oklahoma	23.5	21.6	33.9	28.0	25.0	49.2	—16	—14	—31
Texas	27.5	25.0	41.0	32.7	30.7	45.1	—16	—19	— 9
Mountain									
Montana	25.4	23.4	48.4	26.0	23.4	74.2	— 2	0	—35
Idaho	22.5	22.4	31.6	24.6	23.9	67.0	— 9	— 6	—53
Wyoming	28.8	28.1	43.8	29.0	27.7	72.9	— 1	+ 1	—40
Colorado	25.7	25.1	39.0	32.1	31.7	42.3	—20	—21	— 8
New Mexico	29.8	27.7	44.5	44.1	39.4	92.3	—32	—30	—52
Arizona	27.6	23.7	47.1	44.5	34.3	102.3	—38	—31	—54
Utah	19.3	18.7	42.2	21.8	21.3	50.5	—11	—12	—16
Nevada	29.7	28.4	39.7	29.3	25.6	61.4	+ 1	+11	—35
Pacific									
Washington	22.3	21.3	37.5	24.7	23.7	51.5	—10	—10	—27
Oregon	21.9	21.7	27.5	22.9	22.5	36.9	— 4	— 4	—25
California	22.1	21.2	28.6	24.1	23.5	30.5	— 8	—10	— 6
Alaska	30.8	22.0	49.5	38.2	23.1	82.7	—19	— 5	—40
Hawaii	21.2	20.8	21.4	21.7	22.4	21.5	— 2	— 7	‡

*Excludes New Jersey in 1963. Data not available by color. †Less than 20 deaths, percent change not computed.
‡Percent change less than 0.5.
Note: Mortality data by place of residence except for Alaska and Hawaii which are by place of occurrence in 1953-54.
Source of basic data: Reports of Division of Vital Statistics, National Center for Health Statistics.

■ Infant Mortality in the United and Abroad

In 1966 about 3,629,000 babies were born in the United States and 84,800 died in their first year of life, according to provisional data. These figures translate into a rate of 23.4 infant deaths per 1,000 live births, which is an all-time low for the nation. However, an examination of the variations among states and between racial groups, the slowed pace of improvement in recent years, and the substantial lower infant death rates reported by many other countries make it abundantly clear that much still can be done to improve our record.

Considering first the trends in the United States, it is apparent from the accompanying chart and Table 1 that the rate of improvement in infant mortality has slowed down during the past decade. Between 1953-54 and 1963-64 infant mortality for the country dropped only 8 percent. Among the 50 states and the District of Columbia, one showed no change at all while five actually registered increases, the largest rise (14 percent) occurring in the District of Columbia. This experience contrasts sharply with that for the period 1945-46 to 1955-56, during which the nation's infant mortality rate fell by 27 percent and every state without exception reported progress.

It has been suggested that an important factor contributing to the disappointing record of the past decade was the large scale population shift of rural nonwhites to the cities. This migration intensified many urban and public health problems, among them infant mortality.

Among the states reporting lower infant mortality in 1963-64 compared with 1953-54 the declines were generally small. In 30 states the decrease was less than 10 percent—in Vermont, Connecticut, Arkansas, and Wyoming it was only 1 percent. Only four states—Delaware, Colorado, New Mexico, and Arizona—showed declines of 20 percent or more. The largest reduction, 38 percent was recorded in Arizona, followed by 32 percent in New Mexico. These two sizeable declines are attributable largely to a Public Health Service program among the Indians, begun in 1955, which helped bring about a drop of over 50 percent in the nonwhite infant mortality rates.

During 1963-64, the average annual infant mortality was highest in Mississippi with 40.4 per 1,000 live births, followed by the District of Columbia with 33.5, South Carolina with 32.1, and Alabama with 31.6. The lowest rates were reported in Utah with 19.3, followed by Massachusetts with 20.2, Minnesota with 20.7, and Iowa with 20.9.

Both the chart and Table 1 show the smaller reductions in infant mortality among nonwhites than whites, with consequent widening disparity in infant death rates by race. The 11 percent reduction in the mortality of white infants over the recent decade was twice that for the nonwhite. In 1945-46 the nonwhite to white differential in infant mortality was 1.6 to 1; by 1963-64 it had risen to 1.9 to 1. There are considerable variations by state with respect to the relative progress made in reducing infant mortality rates by race. The reductions of 9 and 7 percent among whites of Louisiana and Georgia, respectively, were accompanied by scarcely any change for nonwhites. In Michigan, New York, the District of Columbia, and in four southern states the rate declined among white babies, but increased somewhat among the nonwhite. Every state which showed an overall increase, except Nevada, did so because of sizeable increases in the infant death rate among nonwhites.

TABLE 2—INFANT MORTALITY IN SELECTED COUNTRIES 1963-64 AND 1953-54

Country	Rates per 1,000 Live Births		Percent Decline Since 1953-54
	1963-64	1953-54	
United States	25.0	27.2	8
White	21.9	24.5	11
Nonwhite	41.3	43.4	5
Scotland	24.8	30.9	20
France	24.4	41.4	41
Israel	23.3	35.2	34
Japan	21.8	46.8	53
Czechoslovakia	21.7	41.3	47
England and Wales	20.5	26.2	22
Switzerland	19.8	28.5	31
Australia	19.3	22.9	16
Denmark	18.9	27.1	30
New Zealand	17.7	20.1	12
Finland	17.6	32.4	46
Norway	16.7	21.7	23
Netherlands	15.3	23.2	34
Sweden	14.8	18.7	21

*United States: data by color for 1963 exclude New Jersey.

France and Netherlands: rates adjusted to include live births who died before registration.

Israel: data by year of registration in 1953-54. Jewish population only.

Czechoslovakia: data exclude deaths of infants born alive after less than 28 weeks gestation, less than 1,000 grammes in weight, and less than 35 centimetres in length, who die within 24 hours of birth.

Australia, New Zealand, and Scotland: data by year of registration rather than by year of occurrence.

Denmark: excludes Faroe Islands and Greenland.

New Zealand: excludes Maoris.

Source of basic data: Epidemiological and Vital Statistics Reports and World Health Statistics Annuals, World Health Organization.

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Where large reductions were recorded for nonwhites, they were generally in states whose nonwhite populations are mostly Indian. For example, in Montana there was no change in the mortality of white infants, but that of nonwhite babies declined by about 35 percent. The corresponding declines in Idaho were 6 and 53 percent for whites and nonwhites, respectively, and in Wyoming the 1 percent increase for whites contrasted sharply with a 40 percent decline for nonwhites. North Dakota and South Dakota also showed large reductions in nonwhite infant mortality, principally among Indians.

Among the major causes of infant mortality, immaturity without further qualification showed the greatest decrease—28 percent over the last decade, followed by a 24 percent reduction for birth injuries and 8 percent for congenital malformations. The other important causes showed no significant change. The decline in the mortality ascribed to immaturity reflects to a degree the increasing tendency of physicians to report more specific conditions associated with prematurity.

(From an article in the May *Statistical Bulletin* of the Metropolitan Life Insurance Company.)

A baby in the United States today has less chance for survival than in 14 other countries. And the blame can be placed on poverty—with its concomitants of inadequate nutrition, lack of education, early pregnancies, illegitimacy, and, especially premature births. A computerized analysis performed at George Washington University shows that less than 2% of all counties in this country account for ⅓ of the excessive mortality rates.

Fatalities In Hazardous Sports

Danger is an ingredient of the thrills associated with automobile racing, skin and scuba diving, and sport parachuting. Thousands of Americans, attracted by such challenges to skill and daring, participate safely in these sports by exercising discipline, attention to equipment, and common sense. However, a needless number lose their lives because of little or no training, overreaching their abilities, disregard of safety rules, faulty equipment, or hazardous conditions at the sports areas.

There are no official records as to the number of persons participating or those killed in these sports; therefore it is not possible to assess the relative dangers with accuracy. Such recent statistical information as is available has been compiled by the Metropolitan Life Insurance Company from newspaper reports, various sports agencies, and government sources, and is summarized in this article. The figures cited for the numbers participating in the various sports are for the most part based on the impressions and rough estimates of sports authorities.

This article is based on a paper, *Automobile Racing, Skin and Scuba Diving, and Sport Parachuting Fatalities*, by Jules V. Quint, Research Associate, Metropolitan Life Insurance Company, presented at the Annual Meeting of the Home Office Life Underwriters Association, Bal Harbour, Florida, April 4, 1967.

Automobile racing, an intensely competitive sport, has frequently been marred by tragedy. At least 106 drivers were killed in automobile racing accidents in the United States during the three years 1964-66. As shown in Table 1, this is about the same as the number of deaths in 1953-55, the first years for which some reasonably reliable records are available. It is believed that about 30,000 drivers are currently engaged in the various types of automobile racing, compared with about 25,000 in the early 1950's.

Despite an apparently increased number of drivers in stock car racing—currently estimated at about 20,000—there has been a marked decline in the known fatalities among them, 35 deaths in 1964-66 compared with 61 in 1953-55. On the other hand, the big surge in the popularity of drag car racing has been accompanied by mounting fatalities, with 16 accidental deaths reported for drivers in sponsored drag racing events in the recent three years against only one in 1953-55. (Drag racing may be described as racing on a straightaway race track either in competition with other cars or alone against measured distance and time.) While fatalities among drivers in sports car racing rose from 5 to 20, it is estimated that the number participating increased from about 1,000 in the 1950's to at least 5 times that number currently. With relatively small numbers of drivers participating, the number of deaths in Indianapolis championship and sprint racing and in midget car events was about the same in recent years as in the early 1950's.

While skin and scuba (self-contained underwater breathing apparatus) diving accounts for only a small proportion of all accidental drownings, the risk connected with this increasingly popular pastime are cause for concern. A study

TABLE 1
ACCIDENTAL DEATHS AMONG DRIVERS IN AUTOMOBILE RACING
United States, 1964-66 and 1953-55

Type of Racing	Number of Deaths 1964-66	1953-56
Total	106	102
Big cars (championship, sprint)	22	22
Drag	16	1
Midget	11	13
Sports	20	5
Stock	35	61
Other and not specified	2	0

Source: Compiled from newspaper reports and data supplied by sanctioning groups.

●

TABLE 2
ACCIDENTAL DEATHS IN SPORT PARACHUTING
United States, 1961-65

	Number of Deaths
Total	125
By Number of Completed Jumps	
First attempt	15
1-10	26
11-50	48
51-100	13
101-200	10
Over 200	8
Unknown	5
By Age (years)	
15-20	17
21-25	48
26-30	32
31-35	13
36-40	4
Over 40	5
Unknown	6

Source: *Parachutist*, Parachute Club of America, Monterey, California, February and April 1966.

of newspaper accounts by the U. S. Public Health Service found that in 1965 at least 84 civilians drowned in underwater diving accidents in the continental United States—60 while scuba diving and 24 while skin diving—a toll appreciably greater than the 58 deaths in 1961 reported by the Metropolitan Life Insurance Company. All but four of the victims in 1965 were males, their ages ranging from 14 to 59 years, with 30 percent of the deaths at ages 16 to 20. While many of the victims were highly skilled swimmers, most had little experience in underwater diving and were in comparatively shallow water. Half of the mishaps occurred in oceans, gulfs, bays, and other large bodies of open water; a fifth in small lakes and other inland waters; nearly an eighth in caves, springs, abandoned mines, quarries, etc.; and most of the remainder in rivers, streams, dams, reservoirs, and swimming pools.

The medical literature concerning underwater skin and scuba diving emphasizes the need for the diver to be physically fit and mentally competent in order to function effectively and safely. Inasmuch as the lungs and heart are subject to considerable stress in diving, physicians warn those with any prior history of respiratory or heart disorders against participating in the sport. In fact, some physicians associated with diving consider even a minor cold or a deviation from normal blood pressure to be cause for ruling out diving until the condition has cleared. Also most authorities, while admitting that chronological age is an arbitrary criterion, agree that a minimum age of 16 or 17 years would help assure the level of mature judgment and physical stamina required for safe diving.

Reflecting the phenomenal increase in sport parachuting since the beginning of this decade, there was a total of 125 known fatalities in this sport during the five years 1961-65 compared with 22 in the six years 1955-60, according to the records of the Parachute Club of America. The toll rose from 15 deaths in 1961 to 34 in 1963 but declined to 31 in 1964 and to 25 in 1965. The PCA estimates that there are about 25,000 active sport parachutists who make at least 10 jumps a year. Experience, as shown in Table 2, figures prominently in the fatal accidents. Fifteen persons lost their lives in their first attempt and 26 were killed after 1 to 10 jumps, these fatalities accounting for a third of the total parachuting deaths. Two fifths of the victims had completed between 11 and 50 jumps and nearly a fifth had logged between 51 and 200. As many as eight fatalities occurred after more than 200 successful jumps. Indicative of this sport's appeal to youth is the fact that nearly four fifths of the deaths occurred among persons under age 30.

A variety of causes contributed to these sport parachuting accidents. Failure to pull the ripcord of either the main or reserve parachute or pulling too late resulted in a third of the deaths. Drownings when landing in water were responsible for a fifth of the fatalities. Other important causes were malfunctioning or entangled parachutes and mid-air collisions. Sponsors of sport parachuting emphasize the importance of carefully adhering to the regulations of the Federal Aviation Administration and the Parachute Club of America in order to minimize the possibility of an accident. The PCA compiles and makes available much factual information with the hope that it will be helpful in alerting parachutists to the potential hazards of this sport.

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(From the May *Statistical Bulletin* of the Metropolitan Life Insurance Co.)

SUMMARY REPORT
of
1967 STATE LEGISLATION CONCERNING THE RESPONSIBILITIES OF THE NORTH CAROLINA STATE BOARD OF HEALTH AND OTHER HEALTH RELATED ACTS

Important health legislation was enacted in the 1967 Session of the General Assembly. Appropriations for the continuation of existing activities of the State Board of Health were made in the amount of $6,232,867 for the first year of the biennium and $6,308,776 for the second year, including amounts to implement a uniform fee schedule for medical fees and the payment of 90% of hospital reimbursable costs.

Additional appropriations for special purposes included: Health aid to counties —$400,000 for each year of the biennium (the first major appropriation for this purpose since 1949); Salt Marsh Mosquito Control—$70,000 for the first year and $100,000 for the second; Genetics Counseling Center—$100,000 for the second year; Scallop Inspection Program—$11,736 for each year; and $42,500 for each year to establish and maintain a Statewide Medical Examiner System. (See complete budget appropriations to the work of the State Board of Health as listed on a subsequent page.)

The following bills concerning the work of the State Board of Health were ratified: (Effective date is shown in parenthesis.)

SENATE BILL 37 — AN ACT TO CONFER UPON THE STATE BOARD OF HEALTH THE AUTHORITY TO PROMULGATE REASONABLE REGULATIONS CONCERNING THE USE OF ETHYL ALCOHOL IN CHEMICAL TESTING PROGRAMS IN NORTH CAROLINA.

This legalizes the purchase of ethyl alcohol for research and demonstration use in Breathalyzer Training Schools. (March 31, 1967)

SENATE BILL 75 — AN ACT TO CREATE THE NORTH CAROLINA CANCER STUDY COMMISSION.

A Cancer Study Commission was created to evaluate and make recommendations concerning effective State measures in this important area. (April 12, 1967)

SENATE BILL 104 — AN ACT TO AMEND ARTICLE II, CHAPTER 14 OF THE GENERAL STATUTES RELATING TO ABORTION AND KINDRED OFFENSES.

This new statute, effective May 9, 1967, provides a basis and procedure for the performance of lawful abortions performed by a doctor of medicine licensed to practice medicine in North Carolina, if he can reasonably establish that: there is substantial risk that continuance of the pregnancy would threaten the life or gravely impair the health of the said woman; **or** there is substantial risk that the child would be born with grave physical or mental defect; **or** the pregnancy resulted from rape or incest; **and** subject also to certain other limiting provisions including 4 months residence in the State prior to the operation. (May 9, 1967)

SENATE BILL 153 — AN ACT TO CREATE THE OFFICE OF CHIEF MEDICAL EXAMINER AND TO PROVIDE FOR A STATEWIDE SYSTEM FOR POST-MORTEM MEDICOLEGAL EXAMINATIONS.

This gives hope for the application of uniform standards and procedures

throughout the state concerning the investigation of undetermined causes of death where there is not an attending physician. Some provisions of the law concerning coroners and the work of the Medicolegal Committee may be affected by this Act. Medical Examiners are also to be appointed in the counties. (Effective January 1, 1968 — finances available July 1, 1967.)

SENATE BILL 436 — AN ACT TO AMEND G.S. 130-177 SO AS TO INCREASE THE FEES CHARGED IN ADMINISTERING THE LAW RELATING TO THE MANUFACTURE OF BEDDING.

This Act increases the fees charged from $10.00 to $12.00. (Effective January 1, 1968.)

SENATE RESOLUTION 540 — A JOINT RESOLUTION AUTHORIZING AND DIRECTING THE LEGISLATIVE RESEARCH COMMISSION TO STUDY WAYS AND MEANS OF PROVIDING MORE MEDICAL DOCTORS FOR SMALL TOWNS AND COMMUNITIES.

To help eliminate the shortage of medical doctors in small towns and communities. (Effective June 13, 1967.)

HOUSE RESOLUTION (F) — DIRECTING THE LEGISLATIVE RESEARCH COMMISSION TO MAKE OR CAUSE TO BE MADE A STUDY OF A STATEWIDE INSPECTION AND LICENSING PROGRAM FOR CHILD CARE FACILITIES IN NORTH CAROLINA.

The increasing concern over the day care of young children was assigned to the Legislative Study Commission for evaluation and recommendation by 1969.

HOUSE BILL 74 — AN ACT TO AMEND THE MARRIAGE LAWS SO AS TO ELIMINATE EPILEPSY AS AN IMPEDIMENT TO MARRIAGE.

This will enable persons with epilepsy to marry. (April 4, 1967.)

HOUSE BILL 159 — AN ACT TO ASSURE ADEQUATE AND CONTINUING AMBULANCE SERVICES TO THE CITIZENS OF NORTH CAROLINA.

Counties are authorized to establish, or to have established, if private enterprise does not, an ambulance service within the county. The State Board of Health is responsible for certain aspects of the administration of this Act. (May 9, 1967.)

HOUSE BILL 192 — AN ACT TO AMEND CHAPTER 35, ARTICLE 7, OF THE GENERAL STATUTES RELATING TO THE STERILIZATION OF EPILEPTICS.

By this Act, Epileptics are not included in the list of those subject to an operation for asexualization or sterilization in a penal or charitable institution supported wholly or in part by the State of North Carolina or any subdivision thereof. (April 4, 1967.)

HOUSE BILL 356 — AN ACT TO CREATE A BOARD OF WATER AND AIR RESOURCES AND TO DEFINE ITS DUTIES AND POWERS RELATING TO WATER AND AIR POLLUTION CONTROL AND WATER RESOURCE MANAGEMENT.

This Act creates a new Board to deal with water and air pollution control and water resource management. The new board includes in its responsibilities for air pollution control those heretofore administered by the State Board of Health. (June 22, 1967.)

HOUSE BILL 542 — AN ACT AMENDING THE STATUTES RELATING TO MARRIAGE RECORDS IN NORTH CAROLINA.

This Law states that persons over sixteen years of age and under eighteen years of age may marry, and the register of deeds may issue a license for such

marriage, only after there shall have been filed with the register of deeds a written consent to such marriage by parents or person, agency, or institution having legal custody. (June 28, 1967.)

HOUSE BILL 604 — AN ACT TO AMEND G.S. 20-9(d) REMOVING "GRAND MAL EPILEPSY" FROM LIST OF PERSONS WHICH SHALL NOT BE LICENSED TO OPERATE A MOTOR VEHICLE.

This will permit epileptics to secure drivers' licenses. (June 27, 1967.)

HOUSE BILL 646 — AN ACT RELATING TO THE TEACHERS' AND STATE EMPLOYEES' RETIREMENT SYSTEM OF NORTH CAROLINA.

This Act liberalizes benefits in the Teachers' and State Employees' Retirement System. A new method of computation of benefits became effective July 1, 1967 and an additional 1% contribution by the employees and matched by the State is to be made. A death benefit in the amount of one full year's salary is in effect for all permanent employees covered by the Personnel Act if they have been employed for one full year and are on the payroll at the time of death. The maximum benefit is $15,000. Other liberalizations effecting persons already retired are included. (July 1, 1967.)

HOUSE BILL 1079 — AN ACT TO AMEND CHAPTER 75A OF THE GENERAL STATUTES SO AS TO REQUIRE SEWAGE TREATMENT OR HOLDING DEVICES ON BOATS OPERATING ON THE INLAND FISHING WATERS OF THE STATE.

To require sewage treatment or holding devices on boats operating on the inland fishing waters of the State. (January 1, 1968.)

HOUSE BILL 1325 — AN ACT RELATING TO LOCAL HEALTH DEPARTMENTS.

This Act makes it clear that employees of a county health department shall be deemed county employees and similarly, employees of a municipality shall be deemed municipal employees. (July 6, 1967.)

HOUSE BILL 1390 — AN ACT TO PROVIDE FOR THE ISSUANCE OF WARRANTS TO CONDUCT ADMINISTRATIVE AND OTHER INSPECTIONS AUTHORIZED BY LAW.

This Act authorizes any official or employee of the State or of a unit of county or local government to obtain a warrant to conduct a search or inspection (either with or without the property possessor's consent) in connection with a legally authorized administrative inspection program (such as the restaurant permit program or septic tank regulations). Nevertheless, health inspection programs have depended in the past on voluntary cooperation and in large measure will continue to do so. (July 6. 1967.)

HOUSE BILL 1401 — AN ACT TO AMEND G.S. 153-246 RELATING TO JOINT ADMINISTRATIVE FUNCTIONS OF CONTIGUOUS COUNTIES AND MUNICIPALITIES IN EDGECOMBE AND NASH COUNTIES.

This Act states that a district health department may be formed from among the Counties of Nash, Edgecombe, and the City of Rocky Mount. (July 6. 1967.)

Anyone desiring an official certified copy of any of these bills should direct the request to the Office of the Secretary of State, State Capitol, Raleigh, N. C. 27602.

NORTH CAROLINA STATE BOARD OF HEALTH
COMPARISON OF GENERAL FUND APPROPRIATION
1967-69 BIENNIUM — 1965-67 BIENNIUM

	FISCAL YEAR 1967-68	FISCAL YEAR 1968-69	TOTAL BIENNIUM
GENERAL FUND APPROPRIATION:			
"A" Budget	$ 5,275,401	$ 5,491,542	$10,766.943
"B" Budget	1,357,466*	1,217,234*	2,574,700*
"A" and "B" Budget	$ 6,632,867	$ 6,708,776	$13,341,643
SUPPLEMENTAL APPROPRIATIONS:			
Reserve for Genetics Counseling Center	—	100,000	100,000
Reserve for Regulation of Scallop Processing	11,736	11,736	23,472
Reserve for Post-Mortem Examination	42,500	42,500	85,000
Salt Marsh Mosquito Control	70,000	100,000	170,000
Total General Fund Appropriation 1967-69 Biennium	$ 6,757,103	$ 6,963,012	$13,720,115

	FISCAL YEAR 1965-66	FISCAL YEAR 1966-67	TOTAL BIENNIUM
General Fund Appropriation	$ 4,751,926	$ 4,952,102	$ 9,704,028
Biennial Increase:			
Total 1967-69			$13,720,115
Less: Total 1965-66			9,704,028
Increase			$ 4,016,087
Percentage Increase ($4,016,087 — $9,704,028)			41.38%

*These figures include $957,466 for 1967-68 and $817,234 for 1968-69 appropriated for the payment of increased medical fees and hospital costs. While these amounts are included as "B" Budget items they were not included in our original "B" Budget which included only request for additional aid to counties and for Salt Marsh Mosquito Control. The request for additional amounts for medical fees and hospital costs was submitted separately from our "A" and "B" Budget.

Computers Are Being Taught To Record Medical Records

Computers are more and more taking on the traits of their creators. Much like humans, the language of computers can lose something in translation. And if the computers happen to be recording medical records, the translation gap can become a serious health hazard.

Researchers at the Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, N. C., are hopeful that one day they will be able to close this gap by developing a special computer system at no significant increase in costs for the hospital.

To initiate work in this field, the U. S. Public Health Service announced today that a Hill-Burton demonstration grant of $984,311 is being awarded to Bowman Gray, covering a three-year period, beginning May 1.

This was one of nine grants totaling $1,676,338 recently approved by the Federal Hospital Council, the official body which advises the Surgeon General on the administratoin of the Hill-Burton Program.

Assistant Surgeon General Harold M. Graning, Director of the Division of Hospital and Medical Facilities, Public Health Service, explained that many hospitals in the United States are presently recording parts of their medical records in a computer. This is ordinarily done by converting words into four, five, or six digit codes which can be stored in less space than English language words. It also requires that the record, as written, be summarized into a given number of pre-selected terms which describe diagnostic or therapeutic observations. In effect, a form of shorthand is used which deals only with what are deemed to be key words or phrases in the record and usually eliminates most qualifying discussion. This has been done to save space and thereby reduce the cost of the computer operation.

"The project at Bowman Gray is intended to demonstrate a means whereby all the qualifying phrases and nuances will be stored in the computer and can, subsequently, he recalled on demand," Dr. Graning added.

Homemaker Service Economy

For each dollar it spends in providing homemaker services a community would have had to spend more than three times that much in the cost of providing other resources to prevent family breakdown, to keep children from placement outside their homes, to aid the ill, the infirm or the elderly.

This has been borne out by a study of homemaker services by Association of Homemaker Services, Inc., New York City. During a five-year period this program spent about $2,700,000 in providing such services to more than 10,000 children, parents and infirm and elderly people. A conservative estimate is that providing this same care through other community resources would cost over three times as much —well in excess of $8 million. Through its homemaker service program this community saved more than a million dollars each year.

Simulation Techniques Aid Workers To Plan Ahead For Retirement

A grant by the U. S. Office of Education to explore the use of simulation and gaming techniques to aid workers in planning ahead for their retirement years has been announced by Edwin F. Shelley, chairman of the employment and retirement committee of the National Council On the Aging.

Simulation techniques are already in wide use in educational and training situations, Mr. Shelley said. Under the NCOA project simulation will be directed toward allowing a pre-retiree see his problems as realities.

"The need for planning well in advance of retirement is recognized," Mr. Shelley pointed out, "but authorities are not always in agreement about the actual points at which specific decisions should be made. Industry, unions and government agencies have instituted pre-retirement counseling programs over the last decade aimed at older workers who will be facing the hazards of reduced income and job activity. Instruction is also provided on financial planning, health care, living arrangements and the use of leisure.

"Too often, though, these programs fail to give the older workers a real feeling for what it will be like to be a retired person nor do they make the problems seem urgent enough to make plans early and systematically," Mr. Shelley continued.

NCOA's project will study the adaptation of simulation techniques to retirement education following analysis of the literature on retirement preparation and establishing the dimensions or problems to be included in a simulation model. There will be some preliminary instructional simulations, and exploratory field testing with selected groups of older workers.

The research, according to Mr. Shelley, will be carried out by Norman Sprague of the NCOA staff and by Dr. Sarane Spence Boocock of the department of social relations at the Johns Hopkins University.

The National Council On the Aging is a national, voluntary agency providing leadership services for organizations and individuals concerned with the field of aging. It is a non-profit, non-governmental organization that is supported by grants from foundations, contributions from individual companies and unions and membership fees.

Residential Pools Are Drowning Hazard

A U.S. Public Health Service official predicted recently that there will be more than 350 residental pool fatalties this year unless pool owners take preventive measures even before the swimming season begins. Of this number, he said, about 250 will die in backyard pools, with the remainder in motel, hotel and apartment pools.

The statement was made by Richard E. Marland, Chief of the Injury Control Program in the Public Health Service's National Center for Urban and Industrial Health.

"Home pool drownings have reached record numbers," Marland said. "The mushrooming growth of these pools has outpaced the ability of many home owners to operate them safely. There are now more than 500,000 in-ground pools, two million portable swimming pools, and about 10 million plastic wading pools in the nation."

A study conducted by Daniel P. Webster, Chief for Recreational Safety of the Injury Control Program, disclosed that 230 persons, over half youngsters under 10, died in home pools in 1965. Marland based his predictions for 1967 on this Public Health Service report.

The study found that more than half of all pool fatalities could be prevented by:

1. Adequate fencing and other protection around the pool.
2. Constant adult supervision of youngsters when near the water; and
3. Instruction of young children in water-survival knowledge and skills at the earliest possible age.

All three of these preventive measures are discussed in a leaflet, "Kid-proofing the Backyard Pool," available upon request from the Injury Control Program, 800 North Quincy Street, Arlington, Virginia, 22203.

TOURIST GUIDE FOR HANDICAPPED

Washington, D. C., is a magnet for tourists, with thousands flocking in daily to see the multiple beauties and wonders of the Nation's Capitol. For many disabled persons, the long flights of steps, the grassy slopes, the revolving doors to many buildings make close-up sight-seeing difficult or impossible. Now, a new publication by the Architectural Barriers Project of the D. C. Commissioners' Committee on Employment of the Handicapped and the D. C., Maryland, and Virginia Societies for Crippled Children and Adults seeks to make visits easier.

Entitled **Guide to Washington for the Handicapped,** the pocket-sized booklet lists more than 525 facilities—churches, hotels and motels, museums, monuments. Government buildings, restaurants, and other tourist attractions—summarizing the facts about them that handicapped sightseers need most to know.

At many locations, special advance arrangements should be made if a blind tourist with a guide dog is to visit, or a wheel-chair is to be accommodated. The guidebook forewarns of these.

Most churches listed have varying numbers of steps that must be negotiated, but offer special aids to handicapped worshippers. A special warning is given, however, relative to the Islamic Center mosque—one of the more popular tourist attractions. Under Moslem sacred tradition, visitors are asked to remove their shoes. If braces make this impossible, the handicapped visitor should take with him something to cover the shoes.

The new guidebook may be ordered from the Architectural Barriers Project Committee, 2800 13th Street NW., Washington, D. C., 20009. The price is 25 cents per copy with bulk rates available.

THE HEALTH BULLETIN
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DATES AND EVENTS

September 25-26 — Governing Council on Aging, Quail Roost, Rougemont, N. C.

October 2-6—American College of Physicians, Burden Hall, Loma Linda, California

October 4-6 — North Carolina Public Health Association, Sir Walter Hotel, Raleigh, N. C.

October 15-17—Family Life Council, Sir Walter Hotel, Raleigh, N. C.

October 15-21—FAMILY LIFE WEEK IN NORTH CAROLINA

October 15-19 — American Association of Medical Record Librarians, Ambassador Hotel, Los Angeles.

October 15-20—American Occupational Therapy Association, Boston, Mass.

October 18-19 — American Cancer Society, New York, N. Y.

October 21-25 — American Association of Blood Banks, Americana Hotel, New York

October 22-26 — American Society of Sanitary Engineering, Boston, Mass.

October 23-27—American Public Health Association, Miami Beach, Florida

October 26-28—Biennial Conference of the N. C. Library Association, Charlotte, N. C.

October 27-November 2 — Joint Meeting American Dental Association—American Association Public Health Dentists, Shoreham Hotel, Washington, D. C.

October 30—20th Anniversary Human Betterment League of North Carolina, Robert E. Lee Hotel, Winston-Salem, N. C.

October 30-November 2 — American Dental Association, Annual meeting, Washington, D. C.

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THE HEALTH BULLETIN

The Official Publication Of The North Carolina State Board of Health

2, #8 AUGUST 1967

Leaders of Eastern North Carolina Public Health Association

Mrs. Margaret Neal of Wilson County was elected president and J. S. Canady of the State Board of Health was named president elect at the annual meeting held at Nags Head.

Lively Little Bulletin

An Editorial in the Sanford Herald

The latest issue of The Health Bulletin, the official publication of the North Carolina State Board of Health, has passed over our desk, prompting new admiration for an old friend.

This special issue features a concise history of 90 years of public health in North Carolina highlighted by photographs of all of the men who have served as State Health Officer. The little eight and a half by six inch bulletin has long been the voice of the State Board of Health, conveying the significant story of the progress of public health work in this state to a wide audience.

The Bulletin tells how from a start with an annual appropriation of $200 a year in 1877, the State Board of Health has grown into its present usefulness. The last General Assembly, in an effort to overcome oversight of the past, appropriated in round numbers, six million dollars for each of the years of the next biennium for public health purposes.

The latest edition of the Board of Health's official publication contains a salute to Dr. Jacob Koomen, the new director who was named in 1966, and all his illustrious predecessors. Sandwiched in between is the story of the unique publication, The Bulletin.

While the act which set up the State Board of Health was passed in 1877 and amended in 1879, the first monthly Health Bulletin did not appear until 1886. It contained reports from 26 counties, with tables made up from reports of county superintendents of health. They gave the weather, the prevailing diseases, epidemics, diseases of domestic animals and the condition of public institutions, especially of jails and poor houses. Here were facts, not always pleasant, but concise and easily seen by all readers. Recorded were facts about jails and poor houses such as the number of persons vaccinated, the number who could read and write, the kind and amount of food and the general sanitary conditions.

Since that far-off day, the Health Bulletin has fulfilled the role the first president of the State Board, Dr. Jones, envisioned for it in 1866 when he predicted, "it will go out as a monthly messenger of glad tidings with healing in its wings, with words of truth and notes of cheer, or sounds of alarm if danger comes nigh."

Since May 1960 Edwin S. Preston, M.A. LL.D. has been editor of The Health Bulletin. For a useful publication, using new techniques in layout, printing, and photographs, yet in the same format, we nominated for accolades this little bulletin read by over 100,000 Tar Heels every month.

Public health officials, city and county officials and doctors get the bulletin free. Other citizens may have it for the asking, and they ask!

The Health Bulletin is as new as the latest wonder drug, yet as familiar as an old waterbottle. And about as indispensable!

—Editorial—Sanford Herald, 8/21/67.

Community Medical Television Network Approved

The nation's first community medical television network, connecting hospitals and medical facilities in the Atlanta area, has received approval from the Federal Communications Commission and is under full operation, its officers report.

The network, part of the National Medical Audiovisual Center and supervised by the National Library of Medicine, Bethesda, Md., is designed to help alleviate the increasing shortage of medical personnel, make more efficient use of medical talent, provide the latest medical knowledge and research, and simplify and possibly reduce the cost of medical education.

Organized during World War II as the U.S. Public Health Service Audiovisual Facility, the network is similar to ordinary commercial television, except that it operates in the 22,500 megacycle (mHz) range, an ultra high frequency band, set aside by the FCC for instructional purposes, the Center said.

Similar Setup: The only other medical complex utilizing the 22,500 mHz system in broadcasting is the California Medical Center in San Francisco, but the NMAC is the first to link geographically separated points, the Center said.

Broadcasts are live or video-taped and are scheduled on a five-day, Monday through Friday, basis, the Center said. Times of broadcasting, however, are irregular in that programs may be in the morning, mid-day, or evening.

Teaching conferences, lectures and paramedical presentations utilizing physicians, nurses and personnel in allied professions are scheduled during the week. Among program subjects may be cardiology and clinical pathology conferences, coronary care in nursing, current research in gynecological cancer, a basic science lecture series (ventilation-prefusion relationship), a course in speech language and hearing problems in children (for therapists), as well as playbacks of various courses.

Daily Rounds: One of the more enlightening programs is the daily "grand rounds." Students conducted by an authority on the topic of discussion for the day are escorted through the hospital or facility followed by a television camera which relays the proceedings to the TV viewers, the Center said.

"In future classrooms, study as we know it will go," said James Lieberman, DVM, NMAC director and associate director for audiovisual and telecommunications, National Library of Medicine. "We will use a whole arsenal of audiovisual materials for self-study in the next decade."

Facilities Involved: Atlanta hospitals and medical facilities interconnected by the NMAC include the Grady Memorial Hospital, Emory U. School of Medicine and Emory U. Hospital, Veterans Administration Hospital, the Georgia Dept. of Public Health, the Georgia Mental Health Institute, Georgia Baptists Hospital, Crawford Long Memorial Hospital, and Kennestone Hospital, Marietta, Ga.

the AMA News

Health News Notes

Cigaret Ads Protested: A ban on all cigaret advertising on television before 9 p.m. was called for in a resolution adopted at the 71st annual convention of the National Congress of Parents and Teachers.

Home Health Service: Referral of medicare patients to home health agencies under plans of treatment established by physicians is increasing. There are now 1,780 such agencies certified for medicare participation, compared to 250 in 1963.

Driving, Drinking: Chronic alcoholics are responsible for one-third of the nation's traffic death toll according to evidence produced by years of research, a highway accident symposium at the University of Michigan was told. Researchers said that including accidents caused by social-drinking motorists, more than half the nation's traffic deaths can be blamed on alcohol.

Fluoridation Law: Minnesota became the second state in the nation to adopt a mandatory fluoridation law when Governor Harold LeVander signed a bill calling for the fluoridation of all municipal water supplies by January 1, 1970. Connecticut passed a similar law in 1965.

"The only Freedom we never lose—the Freedom to choose our attitude."
Victor Frankel (Quoted by W. Hal Trentman)

Fewer children would be scalded by hot coffee if more electric coffeepots were designed with a more stable base and a shorter cord, according to Dr. Richard E. Marland, Chief of the U. S. Public Health Service's Injury Control Program in the National Center for Urban and Industrial Health.

The Suicide Prevention Program for Halifax County became effective at midnight July 1. Any one in Halifax County needing help in this regard can call Roanoke Rapids JE 7-2909, day or night, for assistance. This Project is a phase of the Halifax County Mental Health Program.

An appeal to law enforcement officers and agencies to report whether seat belts were being used at the time of accidents involving moving vehicles is being made by the U. S. Public Health Service.

The Health Bulletin

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Vol. 82 August, 1967 No. 8

The Forgotten Addicts

An Article from Signature, the Diners Club Magazine

By
Leslie R. Jones

Do you drink "to replenish the spirit," as Cicero advised, or "in sorrow" because you can't help it?

Some 65 million Americans imbibe. Occasionally and daily. By the dram and by the quart. Of the total, from 700,000 to 7 million—figures vary—are addicts who are unable to control their consumption. Statisticians at the Metropolitan Life Insurance Company place the number at 5 million. The National Council

on Alcoholism estimates every ninth American has an adidcted wife, husband, brother, sister, mother or father.

Alcoholism, according to the American Medical Association, ranks after heart disease and mental illness as the nation's major disabler and killer. In dollars and cents, the public pays out approximately $500-million a year in automobile accidents caused by drunken drivers, and another $2-billion for jailing alcoholics. The accident rate of alcoholics on the job is twice that of abstainers, and absenteeism due to alcoholism is a staggering 60 million man-hours annually. Alcoholism costs industry more than $500-million a year; the corrosive effect on the addict in terms of human misery is far worse.

"Alcoholism,," reports Dr. Jack H. Mendelson, director of the newly created National Center for Prevention and Control of Alcoholism, "has had high priority but low status."

The National Council of Alcoholism reveals that 35 per cent of the persons interviewed in a recent survey believe alcoholics are "morally weak." They share the view of a "Dear Abby" reader who wrote " . . . Why do so many people . . . defend drunks by giving them titles like 'alcoholics'? And lend further dignity to their weakness by calling it 'a disease'?"

Medical authorities now recognize that alcoholism is a sickness—a disease. Yet there is a general tendency to regard all alcoholics as derelicts and bums who are "weak" rather than victims of a disorder.

Today's Health, the official journal of the A.M.A., quotes a study by Dr. W. A. Engel that "only 7 per cent of the alcoholics are of the 'skid row' type, and from 85 to 90 per cent are employed in factories and offices or maintaining homes."

Ignorance of the problem deprives the afflicted of assistance. Dr. Marvin A. Block, member of the A.M.A. Committee on Alcoholism and Addiction, describes the alcoholic as "an individual who, once he starts to drink an alcoholic beverage, loses his control and cannot stop drinking." He adds, "This can be in a continuous or intermittent pattern, but once he starts, the control is lost and he drinks almost compulsively." The addict may remain sober for years, fall "off the wagon," and then go on a drinking spree that may last for days or months.

Howie Young, defenseman for the Detroit Red Wings, gives a personal description. Recalling the

black period when he picked up more bar tabs and penalties than any player in the National Hockey League, Young says: "Anybody who ever was out there knows what I mean. I had a little disease going, If I had had cancer, I'd be a hero now. Cancer is socially acceptable. But if you've been a drunk, you're a bum."

Young's drinking bounced him from team to team; his wife divorced him and he was jailed for "disturbing the peace." The only way back into society for the hockey player was through Alcoholics Anonymous. A.A. has helped thousands to arrest alcoholism —but victims seldom enroll in A.A. until they have experienced untold tragedy.

Government, science and industry are beginning to think in terms of preventive measures. Research indicates that it takes from 10 to 15 years of increasingly steady drinking to become addicted. Congress recently set up a $5-million-a-year fund to research the entire problem of alchoholism, from the causes through treatment and control. By June, Dr. Mendelson, director of the project, hopes to have five centers where the problem will be studied and new techniques for prevention, treatment and rehabilitation of alcoholics will be demonstrated. The pilot center is in operation at Bethesda, Md.

A number of companise are establising programs to spot potential alcoholics and help them before they become society's drop-outs. Supervisors and personnel directors are on the alert for telltale signs sach as absenteeism immediately after payday, repeated tardiness and a pattern of accidents or mishaps. They are being trained to help the worker recognize his problem and to gain his cooperation in combating it. The programs emphasize that alcoholism is a treatable disease, that recovery is possible, and that it takes teamwork—cooperation of the alcoholic, his family, employer and colleagues. The Allis-Chalmers Manufacturing Company reports that since the adoption of such a policy, the firm has reduced firings of alcoholics from 95 per cent to 8 per cent and has saved an estimated $80,000 annually through decreased absenteeism.

Medical, psychiatric, social and educational help is becoming increasingly available. If you are worried about you own drinking or that of someone near you, seek the help of the facilities in your town. As Howie Young says, it's no fun "out there."—**from SIGNATURE, The Diners Club Magazine, May, 1967.**

What Kind of Records Does the State Board of Health Keep?

A Recent Broadcast over WPTF (680 kc) on Weekly Program at 9:30 A.M. Saturdays.

This is Edwin S. Preston of the North Carolina State Board of Health.

Our guest this morning is Mr. Glenn Flinchum, Chief of the Public Health Statistics Section of the State Board.

Q. We've noticed that your office has appeared to be unusually busy lately. Is there any particular reason for this?

A. The main reason is that we are issuing more certified copies of birth certificates than we have ever issued before in our history. As you know, proof of age is a requirement for every child entering the public schools. Many people are getting their children's certificates now so that they will have them available when school starts in September. Also, many people are traveling abroad this summer, and they too must present a birth certificate in order to get a passport. And of course there are many other reasons why birth certificates are needed; such as, getting a driver's license, applying for a job, or entering the military service.

Q. Tell us what records you have on file at the State Board of Health.

A. We have birth and date records back as far as October 1913. In January 1958, we began keeping a record of all divorces granted in the State, and since January 1962, we have been filing marriage records. In addition, many persons who were born prior to October 1913 have filed delayed birth certificates by producing three or more pieces of documentary evidence to prove the facts concerning their birth. Altogether, we now have about 7,000,000 records on hand.

Q. What information do you need in order to locate a person's birth certificate?

A. We need the name of the person registered and his parents, also his date of birth and county of birth.

Q. Why must you have the parents' names?

A. There are so many people with the same name, it is difficult to positively identify a particular individual's record unless we have the name of at least one parent. This is especialy true of the more common names.

Q. Are you saying that there may be several persons in North Carolina named Edwin Preston?

A. I'd be willing to bet on it. After all, in 7 million records you can find almost any name you can think of.

Q. Speaking of common names, what

surnames are found most frequently in your files? I suppose the Smiths are near the top of the list.

A. It appears to be Jones, Smith, and Williams.

Q. I can imagine that you sometimes find some very unusual names in your files.

A. Yes, we do. For example, we have names such as, Rainwater, Beanblossom, Walkingstock, Cabbagestalk, Sourbeer, and Tiger.
Also, many names serve as a reflection of the age in which a person was born. Many people are named after presidents and other famous people. And, of course, the movie stars have their share of namesakes.

Q. Is the birth rate in North Carolina going up or down?

A. Down. It has been declining for several years.

Q. In closing, do you have any advice for persons who may be writing you in the near future for a birth certificate?

A. Yes. First of all, don't wati until the need arises before getting a copy. Write for one well in advance of the time when you may need it. There is always a possibility that a correction will be necessary, and this takes extra time. Second, be sure and furnish the necessary information for locating the record: parents names, date of birth, place of birth. Third, be sure and enclose the required fee which is $1.00 per certificate.

Thank you Mr. Flinchum. Our guest this morning has been Mr. Glenn Flinchum, Chief of the Public Health Statistics Section of the State Board. This is Edwin S. Preston, of the N. C. State Board of Health for WPTF, returning you to Monitor and Radio Central.

Communicable Disease Center Assigned New Role

Countries throughout the Western Hemisphere will look for guidance to the rabies laboratory of the Public Health Service's National Communicable Disease Center, Atlanta, Georgia, in a new role assigned by the World Health Organization.

The designation of this laboratory as the WHO Regional Reference Center for Rabies in the Americas was announced by Dr. A. M. M. Payne, Assistant Director-General of the World Health Organization in a letter to Dr. David J. Sencer, Director of NCDC.

Dr. R. Keith Sikes, who directs rabies control activities of NCDC has been designated as Director of the Reference Center.

In its new role the laboratory will be responsible for training workers from countries in the Americas and from other countries in diagnostic and control procedures in rabies. It will also direct studies of rabies in domestic animals and wildlife. In addition, the laboratory will conduct research on vaccines for both humans and animals and on rabies diagnostic materials in collaboration with other WHO Reference Centers and laboratories.

For a number of years the rabies laboratory has conducted research on various aspects of rabies control including research on improved vaccines for both humans and animals, and has furnished consultative services and training for State and local rabies laboratories in this country.

New Mailing Method for Drug Information

Drug manufacturers and distributors have been asked to adopt a uniform system of marking envelopes used to mail important drug information to physicians.

The Food and Drug Administration proposed that the industry use the same distinctive envelope designs being used for the agency's "Dear Doctor" letters.

"We strongly encourage uniform use of these standard insignia," said James L. Goddard, M.D., Commissioner of Food and Drugs. "If all firms join with the Government in using envelopes with the same wording and color codes, we can better assume that vitally important information will be quickly sorted out from all the other mail received in the physician's office every day."

The drug information letters should be sent by first class mail, Dr. Goddard said. Ordinary mail should not be sent in the distinctively marked envelopes, he added.

The FDA has adopted messages for three types of drug information:

- IMPORTANT DRUG WARNING (information concerning a significant hazard to health), appearing on a red background.
- IMPORTANT PRESCRIBING INFORMATION (information concerning important changes in drug labeling), appearing on a blue background.
- IMPORTANT CORRECTION OF DRUG INFORMATION, (information concerning a correction of prescription drug advertising or labeling), appearing on a brown background.

Hamburgers

RALEIGH—A warning to processors, shippers, wholesalers and retailers of meat products concerning the labeling of ground meat products has been issued by Agriculture Commissioner James A. Graham.

The commissioner cited a regulation by the North Carolina Board of Agriculture, effective January 1, 1967, which requires that any product labeled or appearing on a menu as "ground beef," "ground beef patties," "hamburger," "hamburger patties," "hamburger steaks" and the like, must be all beef without any "extenders" such as cereals, etc., and shall contain no added moisture or fat and not more than 30 percent of fat.

WILLIAM A. BROADWAY, R.S. of Asheville, Regional Sanitarian of the State Board of Health, who was elected a Vice-president of the National Association of Sanitarians in the annual summer meeting of this organization in Denver Colorado.

New Emergency Medical Services Program Begun

Ambulance Operation a Responsibility of State Board

With the passage of House Bill 159 entitled AN ACT TO ASSURE ADEQUATE AND CONTINUING AMBULANCE SERVICES TO THE CITIZENS OF NORTH CAROLINA, the State Board of Health was given responsibility for:

1. Issuing permits for the operation of ambulances.
2. Adopting standards for the medical equipment and supplies to be carried on ambulances.
3. Inspecting patient compartment of ambulances periodically
4. Adopting regulations setting forth the qualifications required for certification of ambulance attendants and certifying them.

The law also created an Advisory Committee on Ambulance Service to the State Board of Health. The Committee is composed of nine members, one each designated by the following organizations: the North Carolina Funeral Directors Association, Inc.; the Funeral Directors and Morticians Association of North Carolina, Inc.; the North Carolina Ambulance Association, Inc.; the Medical Society of the State of North Carolina; the North Carolina Hospital Association; the American National Red Cross; the North Carolina State Association of Rescue Squads, Inc.; the North Carolina Association of County Commissioners; and the North Carolina League of Municipalities. Representatives have been designated by these respective organizations. It will assist the staff of the State Board of Health in drafting regulations to submit to the State Board of Health for adoption.

This new program is titled Emergency Medical Services and is administratively located in the Accident Prevention Section, Division of Epidemiology. Mr. George V. Elliott, formerly a district sanitarian, is the Coordinator of the program.

Job Protection Rights for Older Workers Urged

Legislation prohibiting discrimination in employment of workers aged 45 to 65 was urged before the House Education and Labor Committee recently by a spokesman for the National Council On the Aging.

Norman Sprague, director of employment and retirement programs for NCOA, urged that such legislation should include remedial action to assist positively the older workers and institute a study of involuntary retirement.

He suggested that the legislation be titled the Older Workers Employment Act of 1967 rather than a measure to prohibit age discrimination in employment.

There is no specific federal legislation to deal effectively with middle-aged and older workers' problems, Sprague said. For people over 65, he pointed out, there are "inadequate and uneven" retirement insurance benefits under Social Security, old age assistance, Medicare, Medicaid and the Older Americans Act.

"The Economic Opportunity Act was designed specifically to aid the poor. Under the Manpower Development and Training Act, the Labor Department and NCOA have worked in creative ways to help the older worker, yet only 11 percent of the persons now assisted by this Act are in the age 45 or older group," Sprague reported.

Legislation prohibiting discrimination in employment because of age, coupled with action programs to help solve workers' and employers' practical problems, properly funded and administered, would be the first major breakthrough for this group, he went on. This legislation, with provisions for research, educational and informational programs and increased facilities for older workers "would provide a valuable addition to our human resources and manpower development programs." NCOA is in the process of establishing a National Instituute of Industrial Gerontology to carry out scientific research on the occupational aspects of aging, as well as industrial retirement, Sprague told the committee.

In the category of "older" persons, he added, NCOA includes the approximately 55 million Americans aged 45 and over, more than a quarter of the nation's population; approximately 37 million are between 45 and 65; approximately 18 million are 65 and older.

This division, he said, corresponds roughly to the pre- and post-retirement phases of the life cycle. This is a rough boundary, Sprague noted, "since on one hand the trend to early retirement means that many persons under 65 have already left the labor market, while on the other hand, approximately one-fifth of those 65 and over are employed."

The National Council On the Aging is a national, voluntary, non-profit organizaton dealing with all aspects of aging. It is supported by foundations, company and union contributions, membership dues and community funds.

Influenza Is On Its Way!

Substantial numbers of cases of Influenza of the A2 type, may be expected during the 1967-68 season, especially in eastern parts of the country, Surgeon General William H. Stewart said recently.

His statement is based on the findings of the Public Health Service Advisory Committee on Immunization Practices.

The Committee points out that A2 influenza virus was recovered only from several small outbreaks in the eastern states during the winter and spring of 1966-67. "No significant amount of Type B infection is likely to occur in the coming year," the report states. This is because in 1965-66 or in 1966-67 most areas of the United States had experienced type B influenza. Type A outbreaks usually occur every two or three years and Type B every three to six years.

Two influenza vaccines are available for the 1967-68 season. A newly introduced (bivalent) vaccine contains only the A2 and B strains which are currently prevalent. The other (polyvalent) vaccine, similar to that used in past years, incorporates older strains (Types A and A1) as well as the newer A2 and B strains. The Committee felt that use of the bivalent vaccine should provide a greater degree of protection against current srains of influenza than previously has been possible. This is true because the total activtiy of the vaccine is divided equally between the current A2 and B strains instead of being divided among other strains as in the polyvalent vaccine.

Again this year the Committee recommended use of the vaccine for persons in groups known to experience high mortality from epidemic influenza. In particular, immunization with bivalent vaccine is recommended for persons in older age groups (persons over 45 and especially those over 65) and individuals with chronic illnesses. The recommendations stressed the need for immunizing patients in nursing homes, chronic disease hospitals, and comparable environments.

"Immunization should begin as soon as practicable after October 1 and ideally should be completed by early December," the Committee's recommendations stated. Persons who require immunization and have not been vaccinated since 1963 should receive a primary immunization series of bivalent vaccine, consisting of an initial subcutaneous dose, followed by a second two months later. Individuals who have been immunized subsequent to July 1963 need only a single booster of bivalent vaccine.

Mandatory Fluoridation: Illinois Gov. Otto Kerner signed a bill requiring the fluoridation of all public water supplies in the state.

Bat rabies continues to be a public health problem throughout North Carolina. During the late spring and early summer the activity of bats increases due to bat migration and raising of young, thus the risk of human exposure is increased. All bite exposures from bats should be classified as serious. Laboratory diagnosis of bat rabies is from brain tissue. It is known, however, that the virus can localize in the salivary glands only. Laboratory results at these times would be negative from brain tissue, even though the saliva contained rabies virus.

New Drug Abuse: A relatively new drug abuse—injecting amphetimines—is a growing problem, according to an article in the July 31 **Journel of the American Medical Asosciation.** The authors report the injected amphetamines have "an additive and relapse potential comparable to that of opiates or cocaine."

Social Security Poll: A poll by the National Federation of Independent Business showed that most of its members favor legislation to permit social security recipients to earn as much as they can from employment without sacrificing any of the social security benefits.

Pharmacists' Role: The president-elect of the New Jersey Pharmaceutical Assn., Leo Dubrow, urged that pharmacists be allowed to administer immunizations to patients on the orders of physicians as one means of helping relieve the medical manpower shortage. Dubrow, speaking at the association's annual convention, called for the re-writing of federal and state laws to permit pharmacists to handle this role.

Humanpower is a most precious resource. The waste of the talents of 19 million Americans aged 65 and over is indefensible at a time when talent is in premium demand, when only one in five senior citizens has a job, when five million elderly live below the poverty level, and when our senior population is growing at a rate of almost 4000 a day.

Smallpox Alert

Physicians were urged to be alert to the possibility of smallpox in any international traveler, particularly one who has just returned from India.

The U. S. Public Health Service's Communicable Disease Center pointed out that a severe outbreak of smallpox is under way in India, and that although there have been no cases in the United States, at least three cases have been introduced into Europe. The most recent, the CDC said, was a physician with an apparently valid vaccination hsitory.

The CDC urged "a high level of suspicion of any international traveler . . . who presents symptoms possibly related to smallpox—fever, backache, and any type of rash."

In partially immune people, the rash can be variable, the CDC noted. It urged physicians in international air and seaport cities to be particularly watchful.

The CDC also said it would offer around-the-clock diagnostic assistance to MDs who call area code 404, 634-2561.

Lung Cancer

Cancer of the lung, a rare disease at the turn of the century, is today the most common cause of all cancer deaths in males. It has become one of the most devastating neoplasms known to medical science. The death rate during the past 30 years, due to bronchogenic carcinoma, has increased 935% while the total male cancer death rate in the United States has shown a relatively minor change. All studies generaly agree that the lung cancer death rate among men with a history of regular smoking for at least 20 years is approximately ten times greater than that of men who never smoked.

Conference on Aging

A conference aimed at stimulating state and local cooperation between medicine and other groups concerned with aging and long-term care will be held Nov. 2-3 in Baltimore.

The meeting will be sponsored by the American Medical Association Committee on Aging in cooperation with the Medical and Chirurgical Faculty of Maryland and surrounding state medical associations.

General sessions will discuss meeting the needs of older people and on new developments in facilities and programs for care of long-term patients. Sessions on aging will include current research in the field, adult education, employment, health maintenance programs, and community service projects, the committee said.

Among topics on long-term care will be new approaches in manpower training and utilization, chronic disease prevention and multiphasic screening, comprehensive health service planning, nursing home care and utilization review, and voluntary and public programs for financing of long-term care.

Further information is available from the AMA Committee on Aging, 535 N. Dearborn, Chicago, 60610.

"It is the consensus among experts in the field that the treatment of cancer with surgery and radiation has gone about as far as it can go," says NCI Director Endicott. "The great hope for the future lies in drug therapy." As Dr. Endicott told the President last summer and as the report to the President now states, the cancer institute is spending more than $35 million a year on the search for drugs that will be effective in the treatment of several types of cancer.

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DATES AND EVENTS

Oct. 27 - Nov. 2 — Joint Meeting American Dental Association — American Association Public Health Dentists, Shoreham Hotel, Washington, D. C.

Oct. 30 — 20th Anniversary Human Betterment League of North Carolina, Robert E. Lee Hotel, Winston-Salem.

Oct. 30 - Nov. 2 — American Dental Association, Annual Meeting, Washington, D. C.

Nov. 9-11 — Gerontological Society, St. Petersburg, Florida.

Nov. 13-17 — National Association for Mental Health, Chicago, Ill.

Nov. 14-16 — Public Health Nursing Supervisors, Directors and Consultants Conference, Chapel Hill, N. C.

Nov. 14-16 — Workshop on Some Organizational Patterns for Home Care, Lemuel Shattuck Hospital, Jamaico Plain, Mass.

Nov. 15-17 — Virginia Hospital Association, Annual Meeting, Hot Springs, Virginia.

Nov. 16-19 — National Society for Crippled Children and Adults, Century Plaza Hotel, Los Angeles, Calif.

Nov. 17 — North Carolina Association of Health Educators, Annual Meeting, Chapel Hill, N. C.

Dec. 4-7 — Association of State and Territorial Health Officers, Washington, D. C.

Dec. 5 — N. C. Health Council, Jack Tar Hotel, Durham, N. C.

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THE HEALTH BULLETIN

The Official Publication Of The North Carolina State Board of Health

J. Douglas Colman
President, National Health Council
New York

Who will be a principal speaker at the 18th Annual Meeting of the North Carolina Health Council which convenes in Durham on December 5 at the Jack Tar Hotel. Mr. Colman is President of the Associated Hospital Service of New York covering seven and a half million persons in the New York area. (See program on page 2.)

ANNOUNCEMENT OF TENTATIVE PROGRAM

EIGHTEENTH ANNUAL MEETING NORTH CAROLINA HEALTH COUNCIL

Tuesday, December 5, 1967

Jack Tar Hotel, Durham, North Carolina

LEADERSHIP CONFERENCE ON COMMUNITY HEALTH PLANNING

9:00 Registration — Mezzanine

PROGRAM

10:00 FERMENT IN HEALTH CARE

Richard Magraw, M.D., Professor of Internal Medicine and Psychiatry University of Minnesota School of Medicine, Minneapolis, Minnesota

10:40 OBJECTIVES AND BENEFITS OF COMPREHENSIVE HEALTH PLANNING

Lee Holder, Public Health Department, University of Michigan Ann Arbor, Michigan

11:20 THE CONSUMER IN HEALTH PLANNING

J. Douglas Colman, President, National Health Council, New York, N. Y.

12:00 LUNCHEON
ABC'S OF COMMUNITY HEALTH PLANNING

Emil E. Palmquist, M.D., Regional Assistant Surgeon General Charlottesville, Virginia

1:40 RESOURCES OF THE STATE IN COMMUNITY HEALTH PLANNING

Charles M. Cameron, Jr., M.D., Director of the N. C. State Health Planning Task Force, Raleigh, North Carolina

M. J. Musser, M.D., Executive Director, The Association for the N. C. Regional Medical Program, Durham, North Carolina

2:20 COORDINATING EFFORTS — IN OVERCOMING OBSTACLES

Rural Community — John C. Reece, M.D., Regional Health Council for Eastern Appalachia, Morganton, North Carolina

Urban Community — O. Norris Smith, M.D., President, Community Health Services of Guilford County, Greensboro, North Carolina

3:00 PANEL DISCUSSION — ACTION IN COMMUNITY HEALTH PLANNING

Chairman — Charles W. Coss, Executive Director, Coastal Plains Regional Commission, Washington, D. C.

Participants — Drs. Cameron, Musser, Reece and **Smith**

3:40 BUSINESS SESSION

4:00 ADJOURNMENT

LEE HOLDER
Public Health Department
University of Michigan
Ann Arbor

O. NORRIS SMITH, M.D.
President, Community Health Services
of Guilford County
Greensboro

Speakers for N. C. Health Council

CHARLES M. CAMERON, JR., M.D.
Director of the N. C. State Health
Planning Task Force
Raleigh

CHARLES W. COSS
Executive Director,
Coastal Plains Regional Commission
Washington, D. C.

Retirement Benefits Geared to Growth of National Product Advocated

Retirement benefits geared to growth of the national product was advocated recently by the National Council On the Aging in testimony before the Senate Finance Committee.

"Such a formula," said Norman Sprague, director of the NCOA's employment and retirement program, would account for both price rises and increased productivity and allow a retired worker to share in the growth of the economy."

Under the plan advanced by the NCOA, social security insurance benefits would have an escalator clause similar to clauses in union contracts which provide wage increases when the cost of living rises.

If the Gross National Product, a measurement of the goods and services produced in the nation, rises 3%, Sprague said said, social security benefits would be increased by 3%.

Other proposals put forward by the NCOA in its testimony on pending changes in the social security bill included extension of coverage of the medicare program to include dental care, podiatry, eye care, drugs, hearing aids and other devices, inclusion in the Senate version of the House provision covering farmers, federal aid for licensed nursing homes, and establishment of nursing home standards.

"While the NCOA is primarily concerned with older people," Sprague said, "it is a national social agency with a responsibility to be fair to the interests of younger people and their problems.

"NCOA is concerned with some of the implications of the House bill regarding aid to families with dependent children. There are punitive aspects of this legislation which encourages the use of sanctions to control behavior.

"The harshest provisions of the House bill are designed to deal with illegitimacy and non-support among Negroes by punitive means and without apparent recognition of the real cause of these phenomena.

"NCOA considers that the benefits under social insurance and social assistance programs be matters of right whether the costs of these benefits have been paid through pre-paid insurance or through general taxation."

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Dr. Alan Guttmacher, M.D., New York, President of the Planned Parenthood Federation of America, principal speaker at the Twentieth Anniversary Banquet celebrating the special occasion when the Human Betterment League of North Carolina marks 20 years of service. The place — the Robert E. Lee Hotel in Winston-Salem.

1967 marks twenty years since the organization of The Human Betterment League of North Carolina, which has pioneered in efforts to conserve the human resources of this state. Much progress has been made in the education of the public in population problems and control, with particular emphasis on prevention of mental handicaps.

Distinguished Visitor

Dr. Alan F. Guttmacher, President of Planned Parenthood - World Population (Planned Parenthood Federation of America, Inc.), is a diplomate in obstetrics and gynecology, a member of the faculty of the Albert Einstein School of Medicine and a Lecturer in Obstetrics and Gynecology at the Mt. Sinai School of Medicine. He retired in 1966 as a member of the faculty of Columbia University's College of Physicians and Surgeons and the Harvard University School of Public Health. He is the author of many scientific and popular books and articles on contraception, infertility, pregnancy, twinning, the history of medicine and related subjects.

A native of Baltimore and a graduate of the Johns Hopkins School of Medicine, he taught anatomy at his alma mater and at the University of Rochester, and after residency-training rose to the rank of Associate Professor of Obstetrics at Johns Hopkins. Later he became Director of the combined Department of Obstetrics and Gynecology at New York's Mt. Sinai Hospital. He served Mt. Sinai until 1962 when he assumed leadership of Planned Parenthood-World Population. He is past President of the New York Obstetrical Society.

Among his many published works are **The Complete Book of Birth Control, Pregnancy and Birth, Babies by Choice or by Chance,** and **The Medical and Surgical Complications of Pregnancy.**

Dr. Guttmacher is Chairman of the Medical Committee of the International Planned Parenthood Federation, and a member of its Management and Planning Committee.

New Executive Director Named for State Nurses' Association

Helen E. Peeler has been named executive director of the North Carolina State Nurses' Association. She succeeds Mrs. Marie B. Noell, who retired June 30. Miss Peeler has served on the NCSNA staff for the past 19 years as counselor and associate executive director. Her special responsibilities have included the Professional Counseling and Placement Service, staff advisor to the Student Nurse Association of North Carolina, and the recruitment, membership and registry programs. Prior to joining the NCSNA staff, Miss Peeler had wide experience in a variety of nursing positions, including general duty, private duty, camp nursing, college nurse, science instructor in schools of nursing, educational director of the school and acting director of nurses at Rowan Memorial Hospital.

NCSNA marked the end of Mrs. Marie B. Noell's tenure of more than a quarter of a century as executive director at "Marie Noell Recognition Day" held in Raleigh on Sunday, June 25. More than 300 members, friends and allies in the health field paid tribute to Mrs. Noell for her contributions to nursing and the leadership she gave to NCSNA. Presentation of her portrait for NCSNA headquarters building was a feature of the program of tribute, which was followed by a reception.

Diabetes Afflicts Millions

Diabetes afflicts an estimated 2.4 million persons in the United States and an additional 1.6 million persons are estimated to have the disease but are unaware of it, according to a report released by the Public Health Service's National Center for Health Statistics.

These and other statistics were collected as part of a continuing health interview survey during the period July 1964-June 1965. The information was obtained in a nationwide sampling of approximately 42,000 household interviews, comprising about 134,000 persons.

The prevalence of diabetes increased with age in both men and women, reaching a peak in the 65-74-year age group. The majority of diabetics reported that their diabetes was diagnosed after they reached 45 years of age.

Eighty percent of the diabetics in the survey had at least one other chronic condition in addition to diabetes. More than half of the diabetics reported three or more chronic conditions. Among 17 chronic conditions tabulated, those most often reported were heart disorders (21.1 percent of the diabetics), hypertension (16.8 percent), and impaired vision (10.3 percent).

Most of the diabetics had been treated by physicians within the previous year. About 75 percent were taking medication, either insulin or oral drugs. Slightly more than half of the diabetics in the study were following diets and about the same number were using more than one of the dietitic foods.

Rates of disability for diabetics were about three times those of the total population, according to the study. Diabetics averaged 54 days of restricted activity from all chronic conditions and 23.3 days of bed disability per year. Women averaged 58.2 days of restricted activity, compared to 48.1 days for men. Women also averaged 10 more days of bed disability than men. However, 83 perecent of all diabetics reported no bed disability due to their diabetes.

HEW Chief Explains Reorganization

By JOHN W. GARDNER
Secretary of Health, Education and Welfare

I want to talk about the reorganization. I'll also say something about the proposed welfare legislation as it has been reported out of the House Ways and Means Committee. Of course it is not yet final; it still must be acted on by the full House and the Senate.

We have tried to simplify our organization here so that we will be in a better position to help you do your job better at the State and local levels. It is the first duty of all of us to devise the best ways we can find to get people the kinds of help they need when they need it.

We are not so naive nor so presumptuous as to think that a reorganization at the federal level can bring about the best of all possible systems of delivery at the local level, which is the only place where it counts. But we do think it can be helpful to bring together all our resources, as we have done, and to provide you easier access to them through clear channels.

In the Social and Rehabilitation Service, we have brought under one roof a new Children's Bureau, a new Administration on Aging, a new Rehabilitation Services Administration. Each of these units will maintain its integrity. Each, you may be sure, will continue to be a vigorous, even vociferous, advocate for the special needs of its special group: the aged, or the handicapped, or children.

But the problems of these groups tend to overlap, and so do the groups themselves. The talents and skills required to deal with them, while specialized in some respects, are similar in others. We believe that the three units can be mutually helpful, mutually reinforcing. And their placement together in one Service makes easier an approach which has long been a goal of those working in all these fields: a unified approach to the individual and to the family, and services available as a utility to all who can use them.

I look forward to a period of dynamic growth for each of the units within the new Social and Rehabilitation Service.

I believe that the Children's Bureau, strengthened through added functions, will become an ever more vital focus for activities involving children and families.

The Administration on Aging, also strengthened with new functions, will become more than ever before a focus for all types of services for all the aged.

And the Rehabilitation Services Administration, with its expanded responsibilities, will be able to make an even broader contribution to work with the handicapped.

We have separated at the Federal level programs having to do with cash payments from the programs offering rehabilitation and social services. There

is growing consensus that these quite different functions should be performed by different people. The reasons are so familiar to you that I shall not go into them. They have to do with making the entire process more simple, efficient, and dignified on the one hand, and on the other freeing scarce manpower to provide services to those who need them. Several States and cities have taken, or are contemplating, steps to separate the operation of these services. The new Assistance Payments Administration will be responsible for developing policies and providing guidance to the States and local agencies on matters pertaining to cash payments.

The Medical Services Administration will be responsible for general oversight of the setting of standards for medical services provided under Title XIX of the Social Security Act—the State Medical programs.

There will be one commissioner of the new service in each of the nine Regions. We believe this will make things easier for you by giving you one channel into Washington instead of four or five.

A word about rehabilitation. I use the word in its broadest sense. By rehabilitation I mean giving people the chance—and the challenge—to develop their own resources, inter and outer, to become as independent and responsible as possible. I mean giving people the chance and the challenge to make the most of their talents and their lives and to find personal satisfaction and fulfillment through participation, to live their lives with some measure of dignity.

Now let me turn to the proposed legislation as it was reported out of the Ways and Means Committee. We see some great opportunities in it. We also see some problems. There are things we wanted that we didn't get, and things we didn't want that we did get.

The bill as reported provides for a new kind of focus on the family as a total entity. We think this can be all to the good.

First, the States would be required to develop a comprehensive plan for each family, and to review it frequently. Second, the States would be required to provide work and training programs for welfare recipients deemed "appropriate" for employment. I'll return to this point in a moment. And third, the States would have to provide greatly enlarged day care and homemaker services for employed AFDC mothers.

The comprehensive plan drawn up for each family would be based on an evaluation of the potentialities for employment of family members over sixteen who are not in school, the health and educational training needs they might have, and the welfare of the children. If the evaluations are well and carefully done, if their goals are broader than the achievement of employment alone, and if the resulting plans are realistically and imaginatively laid, many families now on public assistance will find new hope, new confidence, new stability, and a new opportunity to become productive and participating—with all the increase in personal satisfaction and happiness that goes with it.

With respect to employment, we have had encouraging success. Based on the work-experience programs that have been operating for a couple of years, we have every reason to believe that there are many more individuals who want to be and can be trained and employed.

It is perfectly obvious that not all mothers would wish to, or should, or could, work full-time, or perhaps even

part-time. Bu the unknown number who wish to, or should, or could, ought to have that chance.

Thus far, participation in the work-experience programs has been entirely voluntary, though attractive incentives have been offered. The proposed legislation would make participation a condition for receiving assistance for those determined to be appropriate for work or training. But the bill provides that a recipient of public assistance may refuse such work-training for "good cause," and the existing law allows an individual to appeal any decision to the State agency. I have asked my staff to develop criteria for the administration of these provisions that will ensure protection of the rights of the individual. I am deeply concerned that those righas be preserved.

But what really matters is what happens to each family, and for all practical purposes that will be decided elsewhere, not in Washington. A mother might appear to be a good candidate for work and training on several grounds, yet special circumstances might make it desirable for her to delay entrance into the program. If determinations are made according to rigid formulas inflexibly applied, if lack of imagination and foresight characterize action at the decision level, then the result can only be grief for the individuals and families involved and defeat of the purposes of the program, which are to strengthen the family and move it toward independence.

The work-training projects offer great opportunities, but like all opportunities, they must be exploited with wisdom as well as energy. At the very minimum, we must be sure that we are not preparing candidates for non-existent jobs. To stir expectations and then be unable to pay off is both immoral and foolish—and again, destructive of the ends of the program. But I would hope that we could go beyond merely giving vocational training for already existing or conventional, particularly dead end jobs—that at least some of the projects would be consciously aimed at creating new careers in new kinds of jobs for the participants.

The provisions for day care also offer great potentialities for enriched educational and play programs that would enhance the youngsters' chances for healthy intellectual and emotional growth.

There are other provisions of the proposed law that we feel will make it possible for us to be more helpful to you. I am particularly glad, for example, that increased funds have been made available for child welfare services and maternal and child health.

There is also, however, a debit side to the proposed legislation from our point of view. We feel that some of it, quite apart from other objections to it which might be made, would have the effect of defeating or weakening the overall purposes of the bill.

The Ways and Means Committee rightly places great emphasis on the work and training programs. Yet it deleted the Administration provision that would make it mandatory upon the States to pay full need, as defined by each State itself, to public assistance recipients, and to reprice such standards each year. And I don't need to tell you that most States' definitions of full need are far from prodigal. I will recommend to the Senate the reinstatement of these provisions which were included in the Administration proposal.

Full need has been paid to participants in the successful work-training programs, and we had predicated our

request for an expansion of such programs on the assumption that full need would be met. That is one of the things we asked for and didn't get.

Something we did not ask for and did get was the ceiling which the Committee placed on the AFDC program. The proportion of children on the rolls because of the absence or desertion of a parent would be frozen as of the proportion obtaining in January of this year. I will recommend to the Senate deletion of the provision.

Under the House amendment, the Federal Government would be foreclosed from sharing in the support of children whose condition is precisely the same as that of children already being assisted. The States would be encouraged—virtually forced—to establish even more restrictive eligibility requirements, or else to lower the already inadequate support being paid.

I do not believe that children should have to pay for the shortcomings and inequities of the society into which they are born. I do not believe that children should have to pay for the real or supposed sins of their parents. And I think it would be shortsighted of a society to produce, by its neglect, a group of future citizens very likely to be unproductive and characterized by bitterness and alienation.

Earlier, I spoke of the new opportunities we have to start to do the job that we know needs to be done. But it would be dishonest not to acknowledge the real obstacles we face in trying to do it. Since we don't have all day, I won't name them all.

The first and most obvious thing to say is that many of the problems encountered by the welfare program will not be solved within the context of the welfare program itself. They are rooted in the fact of poverty and all that goes with it—bad housing, poor schools, dismal and decayed neighborhoods, crime, family life that is often unstable, and the feelings of despair, apathy, and hopelessness harbored by so many who are trapped in such environments.

I believe that those in public welfare have been criticized, too often and unfairly, for failure to surmount problems that are beyond their scope and power. Poverty itself is the enemy, and it will take a good deal more than changes in the welfare system to conquer it.

But we here today have to work within the immediate context, with the resources we now have available and within the restrictions placed upon us. We are able to reach only a fraction of the poor—about one-fourth—with financial help. We are able to reach a much smaller fraction of those who need social and rehabilitative services. The very least we can do is to deliver the available money and services effectively to those we are now able to help. We must be ardent advocates for these immediate clients of ours, but we must also strive to keep the eyes of the Nation on the 24 million poor Americans who receive no financial help; on the 5 million children whose fathers work full time all year round and still cannot make enough to support their families adequately; on the millions more, poor or not, who need various kinds of help and service to cope responsibly and fully in a complex society.

I said that we have to act within the present context. That does not mean that we cannot look beyond it. The extremely valuable report made to me by the Advisory Council on Public Welfare enlarges our vision of the job remaining to be done. One may or may not believe that the route proposed by the Council is the best possible one to reach our goal. But it makes vividly

clear the massive commitment of resources and talent that will be required no matter which route is chosen.

I have talked mostly about welfare today because this is a critical moment for our public assistance programs. But in a sense this is a critical moment for all of the programs involved in the reorganization: for all of the children we are able to reach through medical and other services; for all of the aged whose lives can be enriched in a great variety of ways; for all of the handicapped who can be helped toward more independent and asatisfying lives.

For those of us involved in these fields, I think it is fair to say that there has never been a time when we saw the needs more clearly or were willing to face the problems more honestly. We are now prepared to say that we want a Nation in which no one is damaged by circumstances that can be prevented, a Nation in which everyone is enabled to make the most of his potentialities, a Nation in which no one is shut out from the life of society.

To achieve this kind of Nation will require a mobilizaiton of public understanding and support far beyond anything we have attempted so far. I assure you that I will do my best to try to enlarge public understanding and rally the support we need. And I urge you to do the same in your communities. We need hands to help us and heads to think with us. Make the most of your ald allies in the voluntary agencies and other groups. Rally new allies from the great pool of talented womanpower, from students, from businessmen, from all who will want to have a share in conquering our problems when they are helped to understand what those problems are. You will be doing them a favor. And you will be doing the country a great service.

Health In South Viet Nam

The population of South Viet Nam is approximately fifteen million. A 1964 U.N.E.S.C.O. study showed that fifty-three percent of the people are under twenty-one and forty-six percent are under sixteen years of age. This is a reflection of the life expectancy of thirty-five years and the cumulative death rate which reaches fifty percent at age twenty (In the USA the corresponding age is 60). Infant mortality is estimated at twenty-five percent—more than tenfold that of the USA.

Major public health problems include tuberculosis, polio, typhoid, and enteric infections. Malaria control has been severely hindered by the war. Four thousand five hundred cases of bubonic plague occurred in 1965 and the W.H.O. reported an increase of twenty-five thousand cases of cholera in 1964. Four fifiths of the population has been infected with trachoma and thirty percent are partially blind as a result. Vitamin deficiencies including beriberi, night blindness, and kwashiorkor occur. Dental care is poor. Potable water exists only in large cities. Garbage collections in cities is inadequate.

There are approximately one thousand South Vietnamese physicians. Seven hundred are in the army and about half the remainder are in Saigon. In rural areas the physician patient ratio is often 1:250,000 or less.

Medical Opinion and Review, August, 1967.

Tar Heel Name Calling – a Funny Affair

By Louis Payne

When the roll is called up yonder, the list of Tar Heel names is likely to cause some lifting of heavenly eyebrows.

Naturally, there'l lbe a whole raft of Joneses and Smiths and Williamses from North Carolina. But mixed in—like ants in the picnic basket—will be some of the dangdest monickers east of Dogpatch.

There'll be parts of the body: Earwicker, Smallbones, Bushyhead, Lefthand, Rawbottom, Cutlip, Montooth, Allhands, Hipskin, Cripliver, Endfinger, Sliptoe, Pigfoot and Catlip.

A few animals: Oyster, Dogwood, Ramsbottom, Innsheep, Wildcat, Beetlebottom, Fischback, Rattler, Von Pigg and Peaduck.

Some vegetables: Beanblossom, Cornsilk, Turnipseed, Cabbagestalk, Snodgrass, Cucumber, Orange, Clingenpeel and Picklesimmer.

Some that ought to be kinfolk: Drinkwater, Freshwater, Passwatetr, Tarwater, Waterhouse, Wetmore, Swimmer, Shipwash and Raindrop.

And others that are in a class by themselves: Are, Via, Funny, Spoon, Miracle, Jimbo, Sasfras, Underdew, Bigwitch, Pancake, Pudpud, Takeall, Butter, Unthank, Sourbeer, Blizzard, February and Noise.

Occasionally some of these oddly-dubbed folks get together. For example, John Lonewolf married Laverne Tiger. And Frank Sunday plighted his troth to Eva Saturday.

Imaginary?

Not at all. There are seven million people in the records of the Statistics Section of the State Board of Health here. And the chief of that section—Glenn Flinchum—says that somewhere in these records is just abuot any name you can name.

The Statistics Section has a serious purpose—keeping records of births, deaths, marriages and divorces in the State—but there is plenty down there to tickle your funnybone.

One thing, Flinchum said, is the spelling that people use on the 500 letters a day that pour into the Statistics Seciton. Most of the letters are requests for birth certificates, but the way some peple spell "certificate" is enough to drive you to your Buck Rogers Secret Code Book.

The section has compiled a list of some 225 attempts at the word.

Some are fairly close: certificate, cerfiction, ceriticate, certifate and certifetic.

Others are near enough to be recognizable: signtica, substifment, cutrfucate and birthsrfic.

But some are a mile wide of the mark: stuffer, atifne, stibite, stiff, tiffe, stfick, ceretirfue and suptic.

And then there are the letters themselves. They range from the sublime to the ridiculous and cover most of the ground in between.

In the latter category is a communication received by Flinchum—for what reason it wa sent to him, he does not know—from Catherine III who claims to

be the "Chief of State of the Legal Government-in-exile of All the Russians."

She was booted out of Russia during the revolution, she says. During the Second World War, she went to work for the U. S. government at the pay rate of a five star general, she claims.

The communication to Flinchum says that poor Catherine never got paid for her efforts and she is demanding full pay from the war days to the present along with six per cent interest. Flinchum said the letter fascinated him but was out of his department.

His Favorite

Flinchum's favorite letter—more in the sublime category—is from a lady in Corpus Christi, Texas, who ran into trouble when she tried to get a birth certificate.

"Dear To-Whom-It-May-Concern," the letter begins. "Twice before I went down to the hardware and got a black-suited, wing-collared, prohibition-favoring, bible-quoting, woman-scorning, hair-oiled, cracker-barrelled, lawyer to rite a letter for me in order to get my certificate.

"Along with these two long letters asking for my birth certificate, I was nice enough to tell you what had happened to all my kinfolk and who married who. Now, I did not have to go to all that trouble seeing as how I enclose a dollar each time, one made by the U. S. Treasury and one by a real good friend of mine.

But the lady says that she gives her date of birth.

"My birth was normal although Mama did say that she thought that I took to the syrup and cornbread more than any of the other eight. What hair I had was red and both eyes brown. I had three dimples. I was really sort of cute youngin'. I did not tell you all this before as I kind of hate to talk about myself, but I guess a person has to give you all this kind of information afore you let loose of anythng vital. Anyhow, I don't mind if it will help you all. I forgot what I weighed. Anyhow, you can't go too much by that. I've dieted so much that I'm only a few pounds heavier that what I weighed back there in Guilford County, High Point, North Carolina, on August 26, 1928. (CHECK AGAIN, IT'S GOT TO BE THERE.)"

The lady had a god reason for wanting the birth certificate:

"I'm going to get married when I get that birth certificate. You see my good-looking, tall-in-the-saddle, Democrat-voting, Virgin-admiring, revival-attending, fiance sort of has a question. He thinks I'm either lying about my age or my virtue.

"Now I've been real nice carrying on this one-way correspondence with you. And this is the last dollar in the can. That three dollars had been saved for my trueso, but I don't mind giving it to you all, but I ain't got no more, so you all quit kidding about not having no record of me. Of course, I have no record. No police ever accused me of a thing. So, don't go making no statement like that. I'm beginning to suspicion that one of them Davises that we used to fuss with has lied their way into a job with you all—and if that is so, then get somebody else to check the files—only one of them ever went to school and that the low third grade where they just give you crayons and let you color all day.

"If is any help to you, my family is Irish and only granny drinks," the letter concluded.

Below the signature is a list of who received a carbon copy of the letter: the President, the Governor, Billy Graham, the warden, the UN (Commitee on vitals and vittles) and the KKK. One copy apiece!

—From Raleigh News & Observer

New Worker Joins Staff of Council On Aging

Mrs. Mary Snyder, one of the State's leading authorities in the field of gerontology, has been added to the staff of the North Carolina Governor's Cooordinating Council on Aging, Eddie Brown, Executive Director, announced.

Mrs. Snyder comes to the Raleigh job from the UNC School of Nursing at Chapel Hill where she had been an instructor and program coordinator in projects to aid older citizens. Before that, she was Assistant Director of Nursing Services, S. E. Area, for the American National Red Cross in Atlanta, Ga. She holds a Master's Degree in Public Health from the School of Public Health in Chapel Hill.

According ot Brown, Mrs. Snyder will serve as a Program Specialist for the Council on Aging. She will work with State agencies, schools, and other organizations across the State to further the Council's program of bringing a richer life to the State's older citizens.

New Health Manpower Program

HEW and Labor Department officials are busy putting the finishing touches to a major new health manpower program. Purpose of the project, to be announced soon, is to attract former GI's into the civilian health field. About 65,000 servicemen who learned health care skills in the service are discharged every year. Most go into other fields.

As the serviceman is processed through a military separation center, on his way back to civilian life, he will be asked to fill out a card listing his home address and his specialized training. Cards indicating health skills will be turned over to hometown employment offices. Within three or four days, employment counselors will call on the veterans, to explain local opportunities for work in the health field. **HEW believes that these ex-servicemen can fill a variety of jobs in hospital emergency rooms, on rescue squads, and in doctors' offices.** HEW has asked the American Hospital Association to enlist the cooperation of its members in providing lists of jobs and training programs to employment offices. AMA has been asked to help spread the word through medical societies.

North Carolina Recalls Walter Reed

By
CHRISTOPHER CRITTENDEN
N. C. Department of
Archives and History
Written for The Associated Press

The conquerer of yellow fever was a Tar Heel. Today the great Army medical center in Washington is named for him.

Dr. Walter Reed, whose name is renowned throughout the world, lived as a young man in Harrelsville and then Murfreesboro, both towns in Hertford County. Not only that, but when he decided to marry he returned to North Carolina for a bride.

Dr. Reed in 1900-01 headed the U.S. Yellow Fever Commission which proved beyond doubt that the dread scourge was caused by a mosquito bite. To wipe out the disease, all you had to do was eliminate the mosquito.

Two N. C. Markers

The State of North Carolina recently erected two historical markers to Dr. Reed, one in each of the two towns listed above.

Reed's father was a native Tar Heel, a Methodist minister. His mother was the daughter of a North Carolina planter. Reed, the youngest of six children, was born in 1851 in Gloucester County, Va. Afterward his father was assigned to one pastorate after another. In 1886 the family was living in Charlottesville, where Reed attended a private school.

The following year he entered the University of Virginia, and after only two additional years he graduated at age 18. He then attended a medical college and interned at a hospital in Brooklyn. Soon afterward he entered the Army medical corps, where he served the rest of his career.

He came back to North Carolina to marry his boyhood sweetheart. In Murfreesboro he had known Emily Blackwell Lawrence, daughter of a leading merchant, and he now returned to make her his wife.

Arizona Duty

For several years he was stationed at an Army post in Arizona. Then he went to Baltimore, where he specialized in bacteriology. Soon he became head of the Army medical museum in Washington and professor at the new Army medical school.

In the Spanish-American War many U. S. soldiers died of dreaded yellow fever. Soon afterward the U. S. government sent a special commission to Cuba, with Dr. Reed as chairman, to search for the cause and cure of the disease. They found both, and it was stamped out in the U. S. and surrounding areas.

Dr. Reed survived yellow fever and returned home safely. He died in 1902 of appendicitis. He was buried with honors in Arlington.

From Raleigh Times

THE HEALTH BULLETIN
P. O. Box 2091
Raleigh, N. C. 27602

If you do NOT wish to continue receiving The Health Bulletin, please check here ☐ and return this page to the address above.

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Course Collaboration Guide

A guide for Health Technology Program Planning has been published by the American Association of Junior Colleges and the National Health Council Committee of Health Technology Education. This Guide has as its focus the building of strong programs within two-year collegiate institutions through the collaboration of junior colleges with health practitioner associations and community health facilities.

It presents an analysis of program development of health technologies, checklists for junior colleges, health practitioner associations, and health facilities which enumerate the planning to be done by each in support of well organized, high quality health technology educational programs.

The guide provides a framework within which the three groups can work by adapting the suggested guidelines to local needs and influences and offers the basis on which a sound program can be built to utilize the curriculum.

THE HEALTH BULLETIN

The Official Publication Of The North Carolina State Board of Health

Officials Attending Annual NCPHA Meeting

Participating in the 56th Annual Meeting of the N. C. Public Health Association were officials in various aspects of health. Below, from the left, are: Dr. Corinna Sutton, Raleigh, 1967 President of the Association; Fredrick W. Hering, M.S.P.H., Birmingham, Ala., Executive Secretary, Southern Branch, American Public Health Association; and Dr. Maurice Kamp, M.D., Charlotte, newly elected NCPHA President and Director of the Mecklenburg County Health Department.

William Murray Linker, Jr.
Raleigh
Rankin Award

Some NCPHA Award Winners

David Grant Warren
Chapel Hill
Distinguished Service Award

Mrs. Davis D. Clark
Merit Citation

NCPHA Award Winners

Award Recipients 1967 N. C. Public Health Association: From the left: Dr. G. F. Reeves accepted for Burke County Health Department, Morganton, Group Merit Award; — Mrs. Davis Dickens Clark, Halifax County Health Department, Merit Citation; — Mr. William Murray Linker, Jr., State Board of Health, Rankin Award; — Miss Atha M. Howell, Director of Nursing, Guilford County Health Department, Greensboro, Carl V. Reynolds Award; — Mr. David Grant Warren, Institute of Government, Chapel Hill, Distinguished Service Award; — and Dr. Malcolm Tennyson Foster, Health Director, Cumberland County Health Department, Rankin Award.

The Award Winning Burke County Delegation — From the left, Bill Harbison, Mrs. Lorine S. Turner, Dr. G. F. Reeves, Mrs. Clara Avery, Mrs. Anne Anderson, Elmo Pascal, and Mrs. Alice K. Monroe.

25 Year Award Winners

THE HEALTH BULLETIN

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Vol. 82 October, 1967 No. 10

Dr. Malcolm Tennyson Foster
Fayetteville
Rankin Award

New NCPHA Officers

Newly elected officers of the North Carolina Public Health Association for the year 1968 are (from the left): Mr. Ben Eaton, Raleigh, Vice President; Mrs. Margaret Bryant, Raleigh, Treasurer; Dr. Maurice Kamp, Charlotte, President; Miss Lydia Holley, Chapel Hill, Secretary; and Dr. Charles Cameron, Raleigh, President-Elect.

E. L. Rankin, Jr.

Comprehensive Health Planning

Address to the Joint Session of the N. C. Academy of Preventive Medicine and Public Health and The N. C. Public Health Association, October 4, 1967.

Thank you for this opportunity to speak to a joint session of the North Carolina Academy of Preventive Medicine and Public Health and the North Carolina Public Health Association. It has been my good fortune during recent years to have many relationships with different aspects of health services and health planning in North Carolina. These relationships have been so pleasant and stimulating that I actually welcomed Governor Moore's decision that the Department of Administration would be the designated State agency for Comprehensive Health Planning under Public Law 89-749.

It might be helpful if we read two sections from this Public Health Service Act, as amended:

"Section 2 (a) The Congress declares that fulfillment of our national purpose depends on promoting and assuring the highest level of health attainable for every person, in an environment which contributes positively to healthful individual and family living; that attainment of this goal depends on an effective partnership, involving close intergovernmental collaboration, official and voluntary efforts, and participation of individuals and organizations; that Federal financial assistance must be directed to support the marshaling of all health resources—national, State, and local—to assure comprehensive health services of high quality for every person, but without interference with existing patterns of private professional practice of medicine, dentistry, and related healing arts.

"(b) To carry out such purpose, and recognizing the changing character of health problems, the Congress finds that comprehensive planning for health services, health manpower, and health facilities is essential at every level of government; that desirable administration requires strengthening the leader-

ship and capabilities of State health agencies; and that support of health services provided people in their communities should be broadened and made more flexible."

The goal of comprehensive health planning is to assure the highest level of health attainable for everey person. The objectivse are:

1. To increse the capacity of continuing, comprehensive planning for health, and

2. To redirect the focus of grant programs to revitalize State and local health efforts and to focus on the delivery of services to people.

The Act amends and replaces Section 314 of the Public Health Service Act. In brief, the new provisions encompass three major areas—planning, health services and manpower.

Under planning, the Act provides formula grants for comprehensive State health planning, calls for a State health planning agency, calls for a State health planning council and authorizes $2.5 million for 1967 and $5.0 million for 1968. Project grants for areawide planning will support comprehensive, metropolitan area or other local planning, and will replace areawide facility planning grants authorized under Section 318, and will make available $5.0 million for 1967 and $7.5 million for 1968. Project grants for training, studies and demonstrations will support the necessary training related to comprehensive health planning. There will be available $1.5 million for 1967 and $2.5 million for 1968.

Under health services, there are formula grants for public health services to be distributed on a mathematical basis to the States with no earmarking for categorical programs. This will be a block grant. A total of $62.5 million has been provided for 1968, and local and volunteer agencies may participate. Project grants for health services development must meet health needs of limited geographic scope or of special regional or national significance. They may stimulate new programs or enable studies, demonstrations or training to develop new methods, etc. There will be $62.5 million available for 1968 and grants may be made to any public or voluntary agency.

Under manpower, the Act encourages interchange of personnel with the States and authorizes exchange between States or local agencies and the Federal Government. It also provides for conferences with State planning agencies and with State health authorities to review regulations governing formula grants. Authority is provided to furnish personnel, etc., in lieu of cash under all grant programs.

There is no doubt that in combining "health" with "planning", Congress has brought together two of the most visible, dynamic and controversial areas of society. In view of the fact that health has become a politically potent issue in national, State and local campaigns, did Congress make a mistake by enacting such legislation? In my opinion, it did not. Is there genuine need for comprehensive health planning? Definitely yes —in my opinion. In our brief efforts at the State level, we have already discovered that there are at least forty-two agencies, organizations, commissions, committees and other administrative units in State Government with some health responsibilities.

A recent paper on health planning pointed out that our health system had problems. "Japan has just passed the United States in reduction of infant mortality. Two hundred health professionals struggle for their piece of the patient. Thirty or forty planning endeavors exist in a State, each trying to im-

(Continued on page 10)

The 56th Annual NCPHA Meeting

The 56th annual meeting of the North Carolina Public Health Association in Raleigh, October 4-6, 1967 was focused on the membership with major emphasis given to reports of developments in public health in North Carolina. Over 850 members from throughout the state attended the convention.

Corinna Sutton, Ph.D. in her Presidential Address gave particular attention to activities within the area of Continuing Education during the past year. She provided a preview of developments to be expected as the NCPHA, the North Carolina State Board of Health and the Southern Branch, APHA. work together to provide educational opportunities for public health workers in North Carolina. Mr. Fred Herring, Executive Director of Southern Branch, attended the convention and displayed an exhibit on the Continuing Education Project.

Dr. Jacob Koomen, State Health Director, spoke of the dynamic activities in public health stimulated both through federal and local legislation. He challenged the family of public health in North Carolina to meet these changes in the same spirit and manner in which they had many such developments during the years.

Mr. Edward L. Rankin, Jr., former

Director of North Carolina Department of Administration, addressed a joint session of the North Carolina Academy of Preventive Medicine and Public Health and the NCPHA on "Comprehensive Health Planning—Public Law 89-749". Since the Governor had previously established an Inter-agency Council, Mr. Rankin described an effective climate for statewide health planning. Mr. Rankin recognized that North Carolina was doubly fortunate in having available Dr. Charles M. Cameron, Jr. from the UNC School of Public Health to direct the agency, since Dr. Cameron had just completed a nation-wide study of state health planning. The problems of definition, cooperation, and mutual goal-setting in comprehensive health planning were underscored by Mr. Rankin but a positive statement was given of the possibility that present health activities would be much improved through focusing on problems and using modern technology in implementation and evaluation.

Officers elected for the coming year were: Dr. Maurice Kamp, Charlotte, President; Mr. Ben Eaton, Raleigh, Vice-President; Dr. Charles Cameron, Jr., Chapel Hill, President-Elect; Miss Lydia Holley, Chapel Hill, Secretary; and Mrs. Margaret Bryant, Raleigh, Treasurer.

Twelve sections met during the NCPHA Convention with program themes including "The Future of Environmental Health Program as influenced by Comprehensive Planning", Psychiatric Consultation to Private Physicians and Health Departments in North Carolina", "Consultation as a Process and Practice", and "Management of Manpower, Money, and Materials". Section chairmen for the coming year are: Health Directors, Dr. Ronald Levine; Sanitation, Mr. Al Daniels; Secretarial and Statistical, Mrs. Lucille Mitchell; Nursing, Miss Shirely Callahan; Laboratory, Miss Janie Shearin; Health Education, Mr. George Shackelford; Nutrition, Miss Elizabeth Jukes; Mental Health, Dr. Alton Mayberry; Venereal Disease Control, Mr. Robert Hardin; Dental Health, Dr. Glenn Blackwell; Physical Therapy, Miss Sally Farrand; Public Health Management, Mr. Clark Edwards.

The formation of a Public Health Management Section was formally accepted by the NCPHA at this Convention and it was granted a charter from the Association of Management in Public Health as a affiliated chapter.

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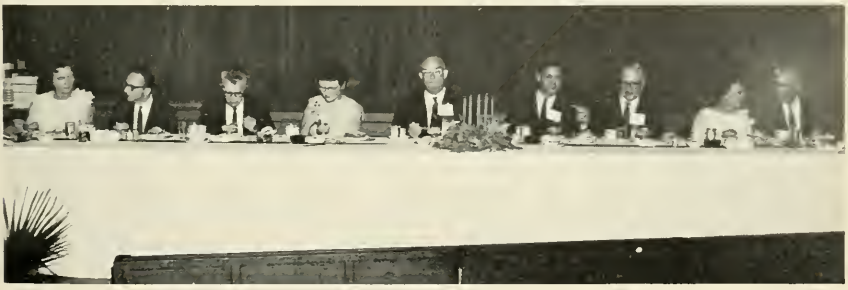
Submitted for publication in the American Journal of Public Health by Lydia S. Holley, Secretary, NCPHA.



Health Planning

(Continued from page 7)

prove health through planning and to ensure that its planning is unique and autonomous. Medical care costs have risen so precipitously that the President has established a commission to study them.

"No one denies that most communicable diseases have been conquered, that sanitation is taken for granted, that the average individual can expect to live to sixty-five years rather than forty-seven years. But no one denies either that the health of the nation is not as good as it could be, that the best possible use is not being made of our resources. It's become a cliche—there's a crisis in health."

If comprehensive health planning is needed, then what are we doing about it in North Carolina? Governor Moore took a long, hard look at this problem, and decided to make the Department of Administration designated agency for Pubic Law 89-749 for the simple reason that this designation would keep comprehensive health planning close at hand. In addition, the Department of Administration, by virtue of the fact that it is an extension of the Governor's powers and office, would be the powerful, neutral base of operation for cooperation and coordination with State, local and Federal agencies, as well as private and voluntary groups.

As Director of Administration, I established the Office of Comprehensive Health Planning in the Department of Administration on July 1, 1967. It was my good fortune to be able to obtain the services of Dr. Charles M. Cameron, Jr., Professor of Public Health Administration at the School of Public Health, University of North Carolina at Chapel Hill, as Director of this office. By another stroke of good luck, Dr. Cameron had just completetd a one-year study of comprehensive health planning across the nation. On September 15, Elmer M. Johnson, a native of Raleigh, joined the Office of Comprehensive Health Planning as Assistant Director. For the past six years, Mr. Johnson has been employed in St. Louis, first as Planning Director for Health Services of the Health and Welfare Council of Metropolitan St. Louis and more recently as Associate Executive Director of the Metropolitan St. Louis Hospital Planning Commission.

Some years ago the Commissioner of Public Welfare, the Superintendent of Public Instruction, the State Public Health Officer and the Commissioner of Mental Health began to hold informal meetings to discuss matters of mutual interest in welfare, health and educational matters. This became known as the Interagency Committee. When I joined Govenror Moore's Administraton in January, 1965, I began attending this informal committee from time to time. After being designated to direct comprehensive health planning, I requested that the department heads represented in the Interagency Committee serve as a comprehensive health planning technical committee for the Office of Comprehensive Health Planning. This group now includes the head of the State Medical Care Commission, the Director of Personnel, the Vice Chancellor for Medical Sciences of the University of North Carolina at Chapel Hill, the Cooordinator of the State Planning Task Force, in addition to those department heads mentioned above. The Director of Administration serves as Chairman of the Committee.

I want to emphasize that this small, in-house committee of State officials will not be the sole architects of any master comprehensive health plan for North Carolina. Competent as they are, I do not believe that this group, or any

other group, should plan for the entire health community of our State, without first involving those many health providers and health consumers involved. We expect to communicate with all segments of the health industry during the next two years of health planning efforts.

Meanwhile, the technical committee is hard at work recommending policies and administrative procedures in health planning, reviewing and evaluating our work to date, and coordinating and integrating the official health programs of State Government which will be involved in health planning, program development and implementation.

The Office of Health Planning has concluded a comprehensive health planning grant request which should enable us to receive Federal funds for the operation of the Office of Comprehensive Health Planning. I am deeply grateful for the wonderful support which these experienced health, welfare and educational officials have given to this new project.

In implementing comprehensive health planning, there are many important questions which must be faced. For example, what should be the composition, role and function of the Advisory Council? In what ways should it relate to governmental agencies? What would be its method of relating to nongovernmental organizations? I am not prepared to answer these questions tonight, except to point out that I believe the Advisory Council should represent the major State governmental health agencies, representatives from nongovernmental health organizations and groups, local governmental representatives and consumer representatives. The Federal Act requires that "non-providers" will constitute the majority of Council membership.

It will be the responsibility of Governor Moore to select and appoint the membership of the Advisory Council. The Department of Administration, as the designated agency, and the Comprehensive Health Planning Technical Committee will assist the Governor when he is ready to tackle this assignment. Meanwhile, I assure you that the Department of Administration will welcome all recommendations on possible candidates for membership on the Advisory Council. In view of the scores of health organizations and health-related groups in North Carolina, it obviously will not be possible to have individual organizational representatives on the Advisory Council. In my opinion, the Governor will seek to appoint able individuals who serve in their own right as individuals rather than as designated spokesmen for any particular organization.

In view of the great interest shown in the Advisory Council, here are the functions of the Council, as I understand them:

1. To advise the Office of Comprehensive Health Planning in the conduct of its planning activities.

2. To assist the agency in the identification of the problems, needs and developments relative to comprehensive health services in North Carolina.

3. To recommend to the Governor, boards and commissions of State Government, the State Legislature, private and public organizations of North Carolina courses of action relating to the health needs and health resources of the State.

4. To facilitate communications and cooperation among agencies, organizations, professions and the public in the cause of better health for North Carolina.

Any focus on comprehensive health services must include more than just the treatment of disease. It must deal

with disease prevention, rehabilitation, health education, the influence of the environment on health as well as mental health and social health. It must also include health facilities and health manpower. Health planning must be linked with other planning and development activities of State, local and private groups. Health is an important part of local development, and relates to economic development, education, public welfare, and other fields. The health field needs inputs from other planners now active in society.

I want to emphasize that the Office of Comprehensive Health Planning will have close liaison with the State Planning Task Force, a unit created by Governor Moore in 1965 to coordinate Federal planning programs which relate to multiple State agencies and interests. The Task Force has a planning relationship with some thirty-four State agencies and has specific operational responsibility with the Appalachian Regional Development Act in North Carolina, certain aspects of the program of the Office of Economic Opportunity, the Public Works and Economic Development Act, and that portion of the program of the Department of Housing and Urban Development which relates to statewide planning and development. Dr. Cameron and his group will also work closely with the Division of Community Planning of the Department of Conservation and Development which is responsible for the HUD program related to planning assistance to communities with less than 2,500 population.

I think that a constructive approach to comprehensive health planning will have specific benefits for our State. For example, it should assist the State decision-makers in their decisions about the need for long-term investments in health facilities, manpower and services. It should increase the efficiency of problem-solving efforts by State Government through improved coordination and cooperation among the various agencies now active in health. It should increase the quality and quantity of planning in all aspects of health activities. It should improve the communication among all the many segments of the health care system to the end that the efforts of all—government, private organizations, and private practice and consumer—can be efficiently and effectively utilized in the important work of maintaining and improving health.

As you know, the State of North Carolina is confronted with the need to decide before January, 1970, whether or not it will participate in the Federal medical assistance programs better known as Title XIX. This program authorizes Federal grants to States, under a single matching formula, for medical assistance to all persons receiving public assistance money payments and for certain other medically needy persons, including those now covered by medical assistance to the aged (Kerr-Mills). The State of North Carolina will have the option of participating under Title XIX, or continuing under existing medical assistance programs now administered by the State Department of Public Welfare. However, if the State should decide not to participate in Title XIX, the Federal Government will discontinue on December 21, 1969, to match medical care vendor payments through the individual public assistance titles.

Governor Moore has asked the Department of Administration to study Title XIX and to make specific recommendations to the Governor and Advisory Budget Commission in time for consideration in the preparation of the next biennial budget. In turn, the De-

partment of Administration has asked the comprehensive health planning technical committee to take on this specific task along with its other responsibilities. In my opinion, this will be a most complex problem for all concerned. North Carolina has pioneered in providing many medical services for welfare and medically indigent people. Much hard work remains to be done. I am confident, however, that under the leadership of Governor Moore and all concerned that the 1969 General Assembly will be given reasonable alternatives to consider in this critical public issue.

We must remember that the reason for planning is to move our State toward the goal of assuring the highest level of health attainable for every citizen in our State. We are seeking results—not planning for the sake of planning. Since the State planning agency has no operational responsibilities in health, involvement of those in State and local health departments, volunteer agencies, the private practice of medicine, medical schools, and hospitals is essential in order to get the results which we need to improve health services in North Carolina. With the competent leadership available today, we should move ahead with the constructive health planning which will result in meeting the problems of today, as well as anticipating and being prepared for the problems of tomorrow.

As health professionals, or as individuals interested in any aspect of health, I urge you to participate in and support the comprehensive health planning program now underway in North Carolina. We can, and we must, do a better job of managing the many resources which are now available in our total health system in North Carolina.

Thank you.

Atha Howell, director of nursing, Guilford County, with award chairman, Dr. W. Fred Mayes. She was given the Carl V. Reynolds Award at the NCPHA meeting.

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First Irwin V. Sperry Award Presented to Dr. Mildred I. Morgan

Award established by N. C. Family Life Council, Inc., honors the late "Bill" Sperry, former chairman of the Child Development and Family Relations area in the U.N.C. School of Home Economics, Greensboro.

Recipient, Dr. Mildred I. Morgan (right) of Black Mountain, is given the award certificate and an inscribed silver bowl by Mrs. Kate Garner, 1966-67 President of the N. C. Family Life Council, Inc., at the recent annual meeting. Dr. Morgan's contributions to Family Relations have meant much to North Carolina and elsewhere. She is the former head of Family Life Education at Florida State University and a past president of the National Conference on Family Relations.

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DATES AND EVENTS

December 1-2 Association for Research in Nervous and Mental Disease, New York

December 2-7 American Academy of Dermatology, Chicago

December 4-6 Southern Surgical Association, Hot Springs, Va.

December 4-7 Association of State and Territorial Health Officers, Washington, D. C.

December 5 N. C. Health Council, Jack Tar Hotel, Durham, N. C.

December 4-8 American College of Physicians presents Radioisotopes and Nuclear Radiations in Medicine, Donner Laboratory, University of California, Berkeley, California

December 6-8 APWA Round Table, Washington, D. C.

December 10-14 American Academy for Cerebral Palsy, San Francisco, California

December 11-15 American College of Physicians, University of Texas, Houston, Texas

December 15-17 American Psychoanalytic Association, New York

December 26-31 American Association for the Advancement of Science, New York

December 27-30 American Statistical Association, Washington, D. C.

January 3-5, 1968 N. C. Employment Security Commission, Farm Placement Conference Blockade Runner, Wrightsville Beach, N. C.

January 7-12 American Chemical Society, New Orleans, La.

January 20-25 American Academy of Orthopaedic Surgeons, Chicago, Ill.

January 26-28 N. C. Podiatry Society, Mid-Pines Club, Southern Pines, N. C.

January 29 - February 1 American Physical Society, Chicago, Ill.

THE HEALTH BULLETIN

The Official Publication Of The North Carolina State Board of Health

James Sidney Raper, M.D.

Newly elected President of the N. C. State Board of Health. Dr. Raper is in the private practice of Radiology in Asheville. **(See page 2.)**

JAMES SIDNEY RAPER, M.D.

James Sidney Raper, M.D., of Asheville was elected President of the North Carolina State Board of Health at the recent meeting of that body in Raleigh. Lenox D. Baker, M.D., of Durham was named Vice President.

Dr. Raper, 55, was born in Lexington, N. C. He attended Lexington High School and received his Bachelor of Science degree from Duke University. His medical degree was awarded from the Duke University School of Medicine.

He served as intern at the Rocky Mount Sanatorium, the North Carolina Sanatorium at McCain, and the Germantown Dispensary and Hospital, Philadelphia, Pa. His residency in Radiology was at Duke Hospital.

From 1941-46, Dr. Raper served in the Medical Corp, with the rank of Captain. In 1945 he entered the private practice of Radiology in Asheville and has continued there until the present.

Dr. Raper has served as President of the following organizations: Buncombe County Medical Society, Tenth District Medical Society, and the N. C. Radiology Society. He has been a member of the Board of Directors of the Asheville Chamber of Commerce and of the Governor's Commission on Cancer in North Carolina.

In 1939, he married Kathryn Mobley Cranford, a native of Hendersonville. They have three children — two boys and a girl. Dr. Raper's hobbies are gardening and fishing.

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Today's Priorities in Tuberculosis Control

By ROY V. BERRY, M.D.
Epidemiology Division
State Board of Health

Caseholding

Casefinding

Prevention

Today's priorities in tuberculosis control may be considered briefly under three headings—

Caseholding
Casefinding
Prevention

Caseholding. This means keeping under surveillance known cases.

What does this achieve? In most instances, a patient who is found to have clinically active pulmonary tuberculosis

will follow the advice of his physician and agree to be admitted to the sanatorium for complete evaluation and treatment with anti-tuberculosis chemotherapy. In all probability, he will not require surgery although in a few cases resection of the disease bearing area(s) may materially improve his prognosis beyond that which would be attainable by drug therapy alone. Overall, the results of treatment today, if properly applied, are excellent with perhaps as many as ninety percent of patients including many with advanced disease being able to resume their former occupations and live normal lives.

When the disease can be shown to be responding satisfactorily and the patient becomes non-infectious to others, generally he will be considered for discharge from the sanatorium to continue his treatment at home under the care of his physician, usually a tuberculosis specialist available through the local health department chest clinic.

In reaching a decision about discharge from the sanatorium to continue treatment at home, several factors have to be considered to try to be reasonably certain such transfer will be in the best interest of the patient, his family and community. Not the least of these would be such things as the availability of clinic services, the home "situation," and often other diverse psycho-social or indeed economic factors. Good communications between sanatorium and health departments are essential.

Generally speaking, all patients who have clinically active disease will require an absolute minimum of twelve to twenty-four months of continuous uninterrupted anti-tuberculous chemotherapy from the start of treatment. Several will require longer periods, and some indeed may be advised to remain on drug(s) for life.

Even under the best of circumstances —a good clinical response to drugs, a co-operative patient, good chest clinic services for follow-up medical and nursing supervision after sanatorium discharge, there exists for all patients the possibility of relapse or reactivation, even for those whose treatment included surgery. For certain patients, the risk of breakdown may be greater, for example those who also have diabetes, alcoholism or silicosis. The risk will be considerably greater for those who leave the sanatorium before the doctor feels they are well enough to continue treatment at home and for those who do not continue their drug(s) as recommended by the physician.

In most cases, the risk of breakdown or reactivation (perhaps 5% of all cases treated) is highest during the first two years after discharge from the sanatorium. After five years of being in-

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active, the risk becomes minimal for most.

The importance of caseholding is therefore, by appropriate medical and nursing supervision after hospitalization, to detect at the earliest possible time any reactivation of disease which would be dangerous to the individual himself and also those in contact with him. Reactivation means a return to the status of being infectious, that is of being capable of transmitting tuberculosis to others, family, friends, business associates, etc.

Caseholding also includes lifetime surveillance of all inactive cases, usually accomplished by an annual chest x-ray without need for other medical or nursing supervision. Special situations—those whose disease is quiescent and some patients who have complicating medical problems such as alcoholism, diabetes or become pregnant, may require more prolonged medical and nursing supervision and such supervision may need to be applied at fairly frequent intervals.

Patients who do not value their health very highly and abuse generally accepted standards of healthful living or ignore the advice that has been given are more likely to suffer from a reactivation of their disease. These patients require closer supervision. It should be remembered that these sorts of attitudes are sometimes harbored because of a lack of understanding of tuberculosis and how it behaves. This does not reflect too well on those of us whose job it is to assist the patient surmount his difficulties, many of which are compounded by his having tuberculosis on top of other problems.

Caseholding would include helping to change such attitudes by sympathetic and sometimes firm educational methods and appropriate referral to other agencies or resources for assistance in coping with other medical and non-medical problems. It would also include rehabilitation attempts where such might be indicated for patients severely handicapped as a result of having had tuberculosis.

Casefinding. The most fruitful source of finding new cases today is amongst the household contacts of newly diagnosed cases of active tuberculosis. Efforts should be concentrated on identifying the close contacts of a new case, especially those in the same household as the newly discovered case, and particularly if the new case is one of advanced pulmonary disease with positive sputum. Once identified, the contacts should be brought to examination at the chest clinic, the examination consisting of a tuberculin skin test and/or chest x-ray.

Skin testing of the contacts is highly desirable and any who are positive by skin test should have a chest x-ray made. As a minimum, all of the contacts should be re-checked after three months by repeating the skin tests on those who were negative or doubtful and re-x-raying those who were found positive the first time. Any tuberculin converters should also be x-rayed. Further check-ups on contacts and the frequency thereof would depend amongst other things on whether the source case had been removed from the home at time of diagnosis or whether he had returned to the home prematurely before reaching a non-infectious status.

The freqency and duration of check-ups on contacts after contact is broken with the source case beyond the minimum is a matter for individual judgment in the light of clinical and other circumstances surrounding each case. There is evidence to suggest lifetime follow-up of contacts where there is a strong family history of tuberculosis is a worthwhile casefinding procedure.

This activity should not prevent all new contacts from being adequately followed up as and when new cases are discovered for at least three, six or twelve months.

All persons who are reported as tuberculosis suspects, that is usually those who have had a chest x-ray which has revealed a lesion which is suspicious of being a tuberculous one or where tuberculosis cannot be ruled out as a possible cause, should be assiduously followed up including hospitalization if necessary to establish the diagnosis.

In certain areas of the state and these may be small communities or parts of larger communities where there is a known high prevalence of tuberculosis, it may be practical to think in terms of a limited intensive chest x-ray survey of the entire area utilizing a mobile chest x-ray clinic such as is maintained by the State Board of Health for such purposes.

The tuberculin skin testing of school enterers with follow-up of the household associates of the positively reacting children in an effort to find the source of the child's infection is a well worthwhile program activity, particularly in high prevalence or high incidence areas. In such areas, the same methodology applied to later school grades may be equally rewarding, perhaps in the third or fourth school grade. None of this activity is very worthwhile as a casefinding procedure unless all of the household associates of the tuberculin positive children are screened to find the source cases.

Prevention. The fundamentals of prevention involve simply reducing to a minimum the opportunities for the transmission of tuberculosis germs from an infected person to others. Early casefinding, isolation and treatment to render the infected individual non-infectious will all act to reduce the opportunity for transmission of tuberculosis germs.

Are there perhaps some more refined methods that may assist in reducing the opportunities for transmission? It is now accepted on the basis of extensive controlled studies and experience that Isoniazid, a tuberculostatic drug used extensively in conjunction with other anti-tuberculous drugs in treatment of clinically active disease, when given for a sufficient length of time to certain categories of persons who are at a higher risk of developing tuberculosis, may significantly prevent sizeable portions of such groups from developing clinically active disease at some point later on in time.

Such categories of persons or "high risk groups" include recent household contacts of infectious cases, especially children, recent tuberculin converters of any age and young children who have significant tuberculin reactions but no known history of contact. Certain adults with inactive tuberculosis who have not previously received anti-tuberculosis chemotherapy or received what today would be considered inadequate drug treatment may be included as "high risk" patients as also would some other patients having certain non-tuberculous diseases which might predispose them to developing tuberculosis.

The annual screening of school personnel to exclude the presence of tuberculosis in a communicable form and thus prevent opportunities for children to become infected is an important preventive measure.

Finally, opportunities to educate school leavers and adults known to have significant tuberculin hypersensitivity to the knowledge they are rather more at risk of developing a case of tuberculosis at some time later in their lives would be included as an important preventive activity.

The Program of the N. C. Tuberculosis Association

By J. T. SNOWDEN, JR.
President, N. C. Tuberculosis Association

In 1783 Benjamin Franklin wrote in a letter to Sir Joseph Banks of Great Britain, ". . . I am pleased with the late astronomical discoveries made by our society. Furnished as all Europe now is with academies of science, with nice instruments and the spirit of experiment, the progress of human knowledge will be rapid, and discoveries made, of which we have at present no conception. I begin to be almost sorry I was born as soon, since I cannot have the happiness of knowing what will be known 100 years hence."

I am leading this article with that reference because it comes quite close to the way I assess the current momentum building up in the North Carolina Tuberculosis Association. At the expense of taking the thought out of context, I must say that I, too, am pleased with the late astronomical discoveries made by our society. And furnished as we are with the help of the academics of science, with nice instruments and the spirit of experiment, the progress of our association will be steady and constructive in the years to come.

To move ahead, however, it is necessary to have a path to travel and a vehicle in which to travel it. A comprehensive reorganizational program will provide the super highway on which the North Carolina Tuberculosis Association will travel in future years. This reorganization has already begun, with consolidation of local associations and preparations for future consolidation of others. By 1970, the path of the state

association will be comprised of a miniature network of ten close-knit organizations linked by a common goal—the elimination of tuberculosis and the control of other respiratory diseases.

But let us shift the focus now from organizational structure, the path, to an energetic year-round program, the vehicle.

The program of our association seeks to stimulate the individual and the community to assume their responsibility in the prevention and control of tuberculosis and other respiratory diseases.

Basic in this program is education and interpretation. It has been emphatically stated that when people understand the basic facts about a disease and why certain measures are adopted for its prevention and control, they are more willing to cooperate in efforts to eradicate it.

In order to bring about this understanding, the tuberculosis association engages in investigation and analysis of the facts and interprets to the individual and the community the significance of these facts for needed action. Concentrated efforts here must be applied not only to TB but to other respiratory diseases, air pollution, and smoking as well.

Through the years the association, in the role of a pioneer, has demonstrated activities to prove their value or to provide solutions where services did not exist or other funds to support them were not available. In North Carolina this was done extensively both in public health nursing and in casefinding. To some extent this has been binding especially in those cases where an agency was reluctant to release the funds so they could explore other areas and demonstrate other activities.

A need growing out of this transferral is met in the association's encouragement and support of legislative proposals and appropriations to make permanent those services necessary to the community's tuberculosis, respiratory disease and related health needs.

The State Christmas Seal Campaign is launched aboard the USS North Carolina by Rear Admiral Robert B. Ellis, Commander in Chief of the battleship. Admiral Ellis, the 1967 State Chairman for tuberculosis associations, is assisted in the campaign kickoff by five-year-old Sharon Johnson and Jean Hardin, the current Miss Wilmington.

Another area in which the association makes a contribution is that of research. At the present time the North Carolina Tuberculosis Association is supporting six research projects in the state. These are being conducted at the Duke University Medical Center, Durham, Bowman Gray School of Medicine, Winston-Salem, UNC School of Medicine, Chapel Hill. A select committee of experienced physicians screens the applications and makes the selection of the projects to finance. This is in addition to the contribution sent yearly to the National Tuberculosis Association's research fund.

As a result of research, new knowledge is emerging from the nation's laboratories and research institutions in great profusion. Tuberculosis associations are in the business of giving effective leadership in the programmed application of that knowledge. This is an attempt to reduce the costly time lag between the discovery and the use of medical knowledge.

Within the past decade new methods of treatment have greatly improved the possibility of eliminating tuberculosis as a major public health problem. Associations are working diligently to help patients understand this and accept adequate treatment. Failure to use this knowledge will result in their becoming chronic sufferers and continuing to spread the disease.

Underlying each of these and all other activities is a supporting education effort. These educational attempts are designed to reach the association's board of directors, other organized groups including civic and social clubs and especially the schools. It is in the public schools that an attempt is made to educate young people, and others through them, on problems of health in general and tuberculosis and other respiratory diseases in particular.

More and more the association's interest in medical education is coming to the forefront. A postgraduate course has been established at the University of North Carolina Medical School to provide one to two years of training in all aspects of pulmonary diseases, both in tuberculosis and other respiratory diseases. This is done to increase the number of qualified physicians in this field. It enables a physician, recently graduated from medical school, to spend a period of time in residency engaged in the clinical and research aspects of respiratory diseases under expert supervision.

In the years ahead I envision that our reduced number of TB organizations will be 1) more actively engaged in the social-behavior sciences in disease control; 2) that they will be able to conduct a painstaking and thorough evaluation of all the social factors in a community which favor the dissemination and perpetuation of tuberculosis; 3) that they will be designing methods of increasing cooperation between medical sociologists and the association for controlling disease; 4) preparing needed statistical studies and engaged in the preparation of educational materials slanted to local conditions and needs; 5) offering doctoral and post doctoral training fellowships for social research in the problems of respiratory diseases; 6) meeting the challenge of smoking and health programs in the schools; 7) making a decided contribution to the prevention and control of air pollution and 8) serving as a clearing house for community resources.

Again I must call on the Franklin letter to express my expectations: ". . . with nice instruments and the spirit of experiment, the progress of human knowledge will be rapid, and discoveries made, of which we have at present no conception."

Comparisons in New Active Tuberculosis Cases

Comparing the reported incidence of new active cases of tuberculosis in North Carolina over the 20-year period 1947 to 1966, there has been slightly over a fifty percent reduction in the number of new active cases reported for the year 1966 compared to the number reported in 1947. This has occurred despite an increase in total population of almost one-third over the same period. The rate of declining incidence has been most marked during the 1950's and least marked subsequent to 1960 since which time between 1200 and 1400 new active cases have been reported each year. The figure for new active cases reported in 1966 was 1,266.

What information can be obtained from a breakdown of these 1266 cases? To begin with, 60 percent of them occurred amongst non-whites. Amongst those that occurred in whites, 73 percent were in males and of those that occurred amongst non-whites, 64 percent were in males. Whereas in 1948, 37 percent of newly reported cases were in persons over 45 years of age, by 1966, 56 percent of the cases were in persons over age 45 years. If just the cases occurring in those under 45 years of age are considered, amongst white, 33 percent of them were females and amongst non-whites 44 percent were females.

What do we find if we look at the total reported new active pulmonary cases for 1966 by stage of disease at time of diagnosis and reporting? Of the 1266 cases, 1087 were pulmonary. Of these 40 percent were far advanced, 32 percent moderatly advanced, 15 percent minimal, and 13 percent primary. These proportions have changed very little over the last several years.

What is the morbidity picture according to geographic region of the state? The mountain region was responsible for 7 percent of the new active cases reported in 1966, the Piedmont region for 41 percent and the Coastal Plain region for 52 percent. Twelve percent of the population reside in the mountain region, 54 percent in the Piedmont region and 34 percent in the Coastal Plain region.

What conclusions would it be reasonable to draw from this brief analysis of morbidity statistics? The reported incidence of new active cases of tuberculosis is proportionately much higher amongst non-whites than whites; it is proportionately higher in the Coastal Plain region than in the other regions; rather more than 2/3's of the pulmonary cases are not being discovered until the disease is in an advanced stage; increasing age and masculinity over the age of 45 years appear to be factors associated with development of active tuberculosis and proportionately more females, especially non-white females under the age of 45 years are affected than females of both races over age 45 years. No information is available through the Communicable Disease Reporting system as to the socio-economic status of those persons reported as suffering from active tuberculosis.

Live Mumps Vaccine Trial

A large-scale field trial of a new "live, attenuated mumps vaccine" conducted among Forsyth County school children has indicated that it is 96.6 per cent effective in protecting against the disease over a five-month period.

Results of the study were reported by Dr. Ronald H. Levine, chief of the communicable disease section and assistant director of the local health division, N. C. State Board of Heatlh, at a meeting of the American Public Health Association at Miami Beach, Fla.

The "double-blind controlled study" produced "no apparent clinical reactions" to the vaccine among the 2,965 children who were inoculated with it, Levine said. Another 329 children were given a placebo (inactive) inoculation.

He said on the day of inoculation, 34.9 per cent of the vaccines and 37.1 per cent of the "controls" were considered susceptible to mumps.

Eighteen cases of mumps occurred 30 to 180 days after inoculation, Levine said, five in the vaccinated and 13 in the placebo-inoculated groups. The attack rates among children estimated to be at risk were 113 per thousand in the controls and 4.98 cases per thousand in the vaccinated group during the five-month period.

"The difference in attack rates between vaccinations and controls—about 23 times greater in the latter than in the former—is highly significant," the report stated.

The 3,294 children who participated in the study were first and second graders in 44 Forsyth schools. All were children "whose parents denied previous clinical mumps and who were neither allergic to egg protein nor neomycin," and whose parents agreed to their participation.

The two groups—those vaccinated and those given the placebo inoculation—were not identified until the end of the study.

The study ran from Nov. 11, 1966, until May 11, 1967. During this period, 36 cases of mumps were reported among study participants and 69 among 4,632 non-participating first and second graders at the same schools. Among non-participants and the placebo group, the number of cases was nearly equal in three examination periods.

However, Levine said, among the vaccinees, 78 per cent of the 36 reported cases, occurred in the first two weeks after inoculation, 8 per cent in the second two weeks and only 14 per cent in the remaining period.

Thus, of the total, there were only the five vaccinated students who contracted mumps during the five-month period of protection (30-180 days after inoculation) in which the effectiveness of the vaccine was determined.

The vaccine used was the Jeryl Lynn strain, level B, of live attenuated mumps virus vaccine. It was supplied for the study through Dr. Maurice Hilleman of the Merck Institute for Therapeutic Research.

Working with Dr. Levine in the field study were Dr. Joseph S. Pagano, assistant professor of medicine and bacteriology, and Dr. William C. Sugg, fellow in the division of infectious diseases of the department of medicine, both of the UNC School of Medicine at Chapel Hill; and Dr. James A. Finer, director of the Forsyth County Health Department at Winston-Salem.

From Raleigh News & Observer

Progress Report On Cervical Cancer Detection Project

O. David Garvin, M.D., M.P.H.

Four Year Results Emphasize Need for Routine Pap Smear Examinations

The August, 1963, Health Bulletin contained an article describing the first year of operation of the Orange-Person-Caswell-Chatham-Lee District Health Department Cervical Cancer Detection Project. This project is supported by a grant from the Cancer Control Branch of the Division of Chronic Diseases, U. S. Public Health Service, and has involved a cooperative effort by the District Health Department, the State Board of Health, the Pathology Department of the University of North Carolina School of Medicine, and the private practitioners of medicine in our five county area. The project has now been in operation over four years.

Modus Operandi of Project:

Orange, Person, Caswell, Chatham, and Lee Counties comprise an area of 2,205 square miles in north-central North Carolina with an estimated 1966 population of 153,122. Approximately 75% of the population is rural and the physician distribution ranges from one in Caswell County to 24 in Lee. Three county hospitals and North Carolina Memorial Hospital lie within the District and Duke Medical Center is nearby.

69.4% of the Papanicolaou smears performed under the project are done in the offices of the doctors in the District and the remaining 30.6% are performed in Health Department clinics (maternity, welfare, and general); a bi-

monthly Cancer Detection Clinic is held in Siler City. Project funds provide for all expenses involved in preparing, shipping, and interpreting Pap smear slides. All smears are interpreted by the Pathology Department of the University of North Caorlina School of Medicine with whom a contractural agreement has been set up.

The goals of the project have been (1) to make Pap smears available to all those women who normally, because of medical indigency, did not have the test routinely, and (2) to keep foremost in the minds of the physicians the importance and benefits of routine cytologic screening of all women.

Results

During the first four years of project operation (July 1, 1962 through June 30, 1966) 11,995 women had initial Pap smears, 2,732 of these have returned for routine first year repeat Paps, 1,141 have had second year repeats, 342 have had third year repeats, and two have had routine fourth year repeats.

The results of the 11,995 initial smears may be summarized as follows:

Of the 70 women diagnosed as having Stage O carcinoma of the cervix (carcinoma in situ, intraepithelial carcinoma), two had Class II smears, 37 had Class III smears, and 31 had Class IV smears initially. The ten women with invasive carcinoma of the cervix (Stage I-II) had Class III Paps in four instances and Class IV in the remaining six cases on their initial smears.

Twenty-four women having routine first year repeat smears had Class III cytology and two had Class IV smears —one of the Class III patients had carcinoma in situ and another was found to have invasive cervical cancer.

One patient of the thirteen having Class III Paps on routine second year repeat examination has been treated for carcinoma in situ.

To sum up our results, 72 women have been found to have carcinoma in situ of the cervix, 11 have been diagnosed as having invasive cervical cancer, and 2 have been found to have endometrial cancer. All but three of these 85 women have received treatment (surgery and/or radiation); the three refusing treatment had carcinoma in situ at the time of diagnosis. There has been one death from pelvic cancer—one of the women with carcinoma of the endometrium.

The great majority of women with carcinoma in situ have been asymptomatic at the time of examination and this emphasizes the need for routine Pap smear examinations at regular intervals for all women.

AGE	TOTAL WOMEN SCREENED	Negative (Class 1)	Atypical (Class II)	Suspicious (Class III)	Positive (Class IV)	Diagnosed Ca. in Situ	Cancer: Invasive Ca.	Endomet. Ca.
15-29	3348	2247	1747	114	10	20	——	——
30-44	4038	2488	1430	63	23	34	5	——
45-59	2174	1417	676	18	10	11	3	1
60-	1435	920	428	15	7	5	2	1
TOTALS	11995	7272	4281	210	50	70	10	2

(Unsatisfactory smears totaled 182 and are included in the total women screened column.)

Measles Immunization

The Committee on Child Health encourages the widespread use of measles immunization both by private physicians and county health departments. There is a large number of children in the state of North Carolina remaining who have not received the vaccine thus making them susceptible.

Vaccine is available in physicians' offices and 60,000 doses are available to county health departments—a sufficient supply to immunize every susceptible child in the state of North Carolina and this is not being done. The Child Health Committee feels that the physicians of the state should by their own choice see that this vaccine is used for these remaining unimmunized children.

It is a fact that measles not infrequently is followed by severe sequellae. Also evidence is increasing that a significant number of school and/or emotional problems in children may be secondary to unrecognized involvement of the nervous system during the course of measles. We feel that the practicing physicians have made an effort to promote measles immunization among preschool children but now we feel that more should be done.

Therefore, the Child Health Committee recommends to the Executive Council that they encourage all physicians through their county medical societies to accept responsibility and see that every susceptible child is immunized by encouraging measles vaccine in their own office, health departments and public clinics to the end that all susceptible children are immunized.

A motion to implement the suggestions of the Child Health Committee was made, seconded and carried.

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Excerpted from the Minutes of the Executive Council of the North Carolina Medical Society, October 1, 1967.

HEALTH FACILITIES ADVISORY COMMITTEE APPOINTED

As he promised he would do early this year, President Johnson has finally named a National Advisory Commission on Health Facilities. Over the next 12 months the 15-member group will examine the present methods of planning and financing health facilitie; the economics of construction; the design and structural factors which affect the cost; and long-range needs for the entire system of health facilities from hospitals to neighborhood health centers. Chairman is Boisfeuillent Jones, President of the Emily and Ernest Woodruff Foundation and former HEW Special Assistant for Health and Medical Affairs.

Members of the commission are: Dr. Samuel L. Andelman, Commissioner of Health, Chicago Board of Health; Dr. James Z. Appel, Lancaster, Pennsylvania, Past President, American Medical Association; Mrs. Angie E. Ballif, Provo, Utah, Director, Utah Division of Public Health and Welfare; George E. Cartmill, Jr., Director, Harper Hospital, Detroit, Michigan, Past president, American Hospital Association; Dr. Leonides G. Cigarroa, Laredo, Texas; Charles E. DeAngelis, Mountainside, New Jersey, Vice President, Walter Kidde Constructors, Inc., New York City; Dr. James L. Dennis, Vice President for Medical Affairs and Dean, School of Medicine, University of Oklahoma, Oklahoma City; Honorable Conrad M. Fowler, Probate Judge and Chairman, Shelby County Board of Revenue, Columbiana, Alabama; Honorable William L. Guy, Governor of North Dakota; Very Reverend Monsignor Harrold A. Murray, Director, Bureau of Health and Hospitals, United States Catholic Conference, Washington, D. C.; Howard N. Nemerovski, Attorney, San Francisco, California; Dr. David E. Rosengard, Medical Director, The Rosengard Clinic, South Boston, Massachusetts; David Sullivan, General President, Building Service Employees International Union, New York City; and Mrs. Fay O. Wilson, Professor and Chairman, Nursing Department, Los Angeles City College, Los Angeles, California.

State Board Regulations On Water

Upon motion of Dr. Cline seconded by Dr. Dawsey an amendment was made to Section 4 of the Rules and Regulations Providing for the Protection of Public Water Supplies to be known as Section 4 (d) and to read as follows:

4 (d) **The Quality of Water Supplied by Public Water Supplies.**

(1) The completely treated or finished water distributed for public use must be of potable quality which shall be determined by conventional bacteriological and chemical tests performed by the designated personnel of the Laboratory of the North Carolina State Board of Health and which conform to the U. S. Public Health Service Drinking Water Standards as described in the Public Health Service Publication Number 956 dated August, 1962, which are hereby adopted by reference.

This amendment to the rules and Regulations became effective upon passage on October 12, 1967, and copies are available as a Supplement to the Health Bulletin from the Sanitary Engineering Division of the State Board of Health.

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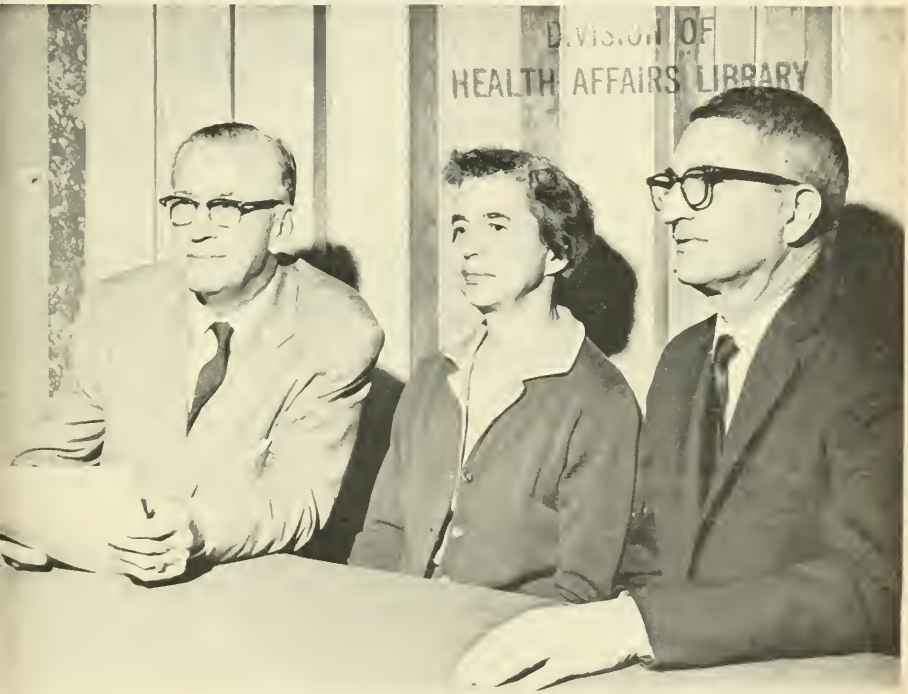

N. C. Health Council Officers

New officers of the N. C. Health Council, elected at the council's 18th annual meeting at the Jack Tar Hotel are, left to right, Dr. Edwin S. Preston, regional director of the Institute for Educational Planning, president; Miss Barbara Kahn, health education consultant with the State Board of Health, secretary; and John H. Ketner, assistant executive director of the N. C. Hospital Association, treasurer. All are from Raleigh. Not pictured is the vice president, Dr. John McCain of Wilson, representing the Medical Society of the State of North Carolina.

With Appreciation and Regret

On November 1, 1967, I conveyed to Dr. Koomen my intention to resign as of December 1st to accept the position as Regional Director of the Institute for Educational Planning, Inc. This agency, with offices in Washington, D. C., and in the Empire State Building in New York City, is a subsidiary of Tamblyn and Brown, Inc., a nationally known public relations and fund raising counsel.

My primary responsibility in the new position is to help non-profit institutions find the government grants for which they may be eligible and assist them through our Washington staff and office to get the grants.

I leave with appreciation and regret after eight happy years with some of the finest folks to be found anywhere.

Edwin S. Preston
Editor, the Health Bulletin
and Public Relations Officer

Gracious Letters

Dear Ed:

I read with much regret of your leaving the State Board of Health. You were always most kind and considerate of me, but to those, I would like to add that you were always a great help, just a little ahead of the other people in thinking of what needed to be done, what recognition should be shown. You will be missed. You have my deepest friendship.

As ever yours.

Lenox D. Baker, M.D.
President, State Board of Health

Dear Ed:

I write to thank you for the important products of your labors while with the State Board of Health. During this time the vigor of your efforts, your creativity, your range of contacts, your ability to plan wisely and to further our Agency's work and the public's appreciation of it, brought recognition and acceptance we could not otherwise have achieved.

We're so pleased you have located well, in a role in which your abilities suit you to new successes. We've enjoyd your visits too. It's great to see you taking such pleasure in your "new career".

Best wishes for a Happy New Year!
JK:dps

Sincerely,

Jacob Koomen, M.D., M.P.H.
State Health Director

Earl Siegel, M.D., M.P.H.

Family Planning in the Strategy of Health

by

Earl Seigel, M.D., M.P.H.

Address given at the 1967 NCPHA Annual Meeting

Dr. Freymann deeply regrets the unavoidable extension of his AID assignment in India. I know he had looked forward very much to the opportunity to get in closer contact with those involved in public health in North Carolina. As a Maternal and Child Health worker, I am grateful for this opportunity since family planning is surely one of the crucial determinants of the health of mothers, children and their young families.

It is no longer news to anyone that disruptions in the old balances between birth and the mortality trends have created a crisis for man which surpasses any other currently confronting him. Developing countries are more particularly and more imminently threatened. However, even in this country the problem endangers the basic aspirations which we have for our society. Poverty, overcrowding, pollution of air and water, and dimunition of available rec-

reation areas are inextricably tied to the growth of our population. The United States is growing at the dangerous rate of about 1.3% per year. Our present population is over 194 million; it is projected to reach 209 million in 1970 and 249 million in 1980[1]. In a little over 200 years it could be 3.1 billion! Can our resources and technology, advanced as they now are, respond to these massive pressures?

In a recent article entitled "Population Implosion" Stewart Udall[2] discusses these issues as they relate to the mushrooming megalopolis' along the eastern seaboard, the west coast and the Chicago area. Urban implosions are a reality and will be increasingly prevalent in many sections of North Carolina. Although this is predominantly a rural state, we are aware of the rapid acceleration in the concentrations of people in our metropolitan complexes.

Although the projected over-all economic and social consequences of overpopulation to the community are ominous, it is the effects of excess fertility on the quality of family life, specifically on health, which we shall pursue this morning. For in the final analysis, the cumulative experiences of individuals and families determine community health. We will consider data which indicate rather clearly that family planning can be a powerful and direct strategy in our struggle to improve the health of growing and developing families.

Before exploring the relationships between family planning and health, it might be well to examine briefly a little of what is known about the size of U.S. families and how they are formed and in so doing, emphasize the problems of special groups.

As you all know, poor women end their childbearing years having delivered significantly more children than upper income women. For example, in 1959 women 35-39 with annual family incomes of $2,000 or less averaged 3.7 children, whereas those women with incomes of $7,000 averaged only 2.5 children[3, 4].

We in North Carolina are also cognizant that low income and large families are more common among rural residents and urban dwellers who were born and reared in rural settings. Regardless of where they now live or where they were born or reared, low income families **want** no more children than do families with higher incomes [5, 6, 7]. Regrettably they have more. There is ample evidence that they lack both the information and resources to plan their families effectively or according to their own desires. From the 1960 Growth of American Families Study we learned that 12 percent of American couples in the childbearing years do not try to limit births to the number of children they actually desire and an additional 20 percent of all fer-

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tile couples try to limit their family size but are unable to do so because of the inappropriateness of the method of contraception chosen[5]. Data from a large North Carolina family planning clinic show that low income women still have little experience with contraception. In 1961, 44 percent of the newly admitted women to that clinic had never before used any contraception; during the first half of 1966 slightly more than 50 percent had not[8]. It would seem that public services are clearly required.

Let us move on from family size to family formation. Until just recently age at first marriage had been dropping steadily for all segments of the population. As an example, in 1965 the babies delivered by teenagers accounted for 25% of all births in North Carolina[9]. Early age at marriage and early age of the mother at the birth of her first child are more frequent among low income families[10]. A close relationship between early age at marriage and later divorce has been noted and very young couples are reported to be more unhappy in subsequent years than those who delay marriage[11]. Pre-marital pregnancy is often the precipitating event in high school students' marriages. Further educational opportunities are then shut off for one or both partners. The boy may end up unemployed or with poor employment. For these young people family formation quickly demands formidable adjustments.

Illegitimacy is another serious aspect of family formation. Looking again at 1965 data in North Carolina, we find that 28% of teenage births were recorded as illegitimate. There is deep concern about out-of-wedlock births, especially among teenagers, not only because of the unfavorable consequences to individual mothers, their infants and even the putative fathers, but also for the heavy burden placed upon community health, welfare, educational and economic resources. In North Carolina, as elsewhere, the numbers of illegitimate births have been rising.

Although numerous psychological, social and economic explanations for illegitimacy have been developed, and they are useful in enhancing our understanding of the problem, they offer us little opportunity for direct intervention. But health workers have an opportunity, indeed a challenge, to move more aggressively. Family planning as a health service can be of immediate benefit. To be blunt, illegitimate pregnancy and reproduction are health issues involving real risks to the mother as well as the child born out-of-wedlock. Because a fertile female is unmarried should not deny her access to a health service. We have no responsibility to judge moral status. Public health nurses are particularly aware that many girls and women will not change their way of life because of fear of another pregnancy. It is loneliness, despondency and lack of emotional support which drive many single girls into relationships leading inevitably to pregnancy. These root causes, it goes without saying, must be attacked, but **pending** their resolution, we should not withhold help. Furthermore, protection against unwanted pregnancies and children is an absolutely necessary part of all attempts at social and educational rehabilitation of these girls.

From the foregoing, brief examination of population growth, family size, and family formation, let us move to family size and its relationship to family health. Most of us are intuitively convinced that family size limitation and birth spacing favorably affect the health of mothers and children. As health professionals, however, we will want to have clearly in hand the avail-

able data so that our programs and priorities my be soundly based. I have selected some information from a surprisingly small total pool, which supports, I believe, the hypothesis that family planning plays an essential role in family health.

Data from the recently completed National British Perinatal Mortality Study were derived from a comparison of fetal and one week infant deaths with a control group of survivors. First birth order fetuses and newborns were at greater risk than the second birth order and the same risk as third birth order fetuses and newborns in each social class. However, for all subsequent birth orders, the risk rose, being especially so in the lower social classes[13]. Again the special family planning needs of the poor are emphasized. There are other studies which demonstrate similar relations between parity and fetal and neonatal mortality[14, 15]. In post-neonatal mortality, biologic reproductive factors, the chief causes of neonatal mortality, are largely replaced by environmental ones.

Data from North Carolina indicate that both white and non-white infants of **young** mothers are especially high risk[16]. Excess mortality is found among high birth order infants but the positive association is minimal. J. N. Morris and his associates in a similar, but more extensive study, including social class as a variable, found that for **each** social class and parity grouping there was an inverse relationship between mortality and maternal age[15]. They found that infants of **younger** and **higher** parity mothers were at greatest risk, regardless of social class, with age being the more important factor. From Morris' study, the heightened environment risks for infants born into already large families are emphasized. In all social classes the rate for deaths caused by infections increases with birth order, whereas the rate for deaths from the prenatally, determined congenital malformations does not[15].

Let us continue to consider problems of early childhood but move from family size to birth spacing. A nationwide British study including more than 13,000 births during a one week period found that mothers were less apt to have low birth weight infants when spacing was **greater** than **2** years but **less** than **6** years[17]. Unfortunately, this report and a number of others which suggest that short birth interval is associated with excess fetal mortality, neonatal mortality or prematurity are confounded by an artifact. Since these **very** outcomes are associated with short gestation, it is obvious that the birth interval must be short. What needs to be done are studies of the relationship between **pregnancy** interval and outcome. Such an investigation is now being undertaken by Drs. Udry and Morris of our department.

How does the number of children that a mother has relate to the quality of care she provides? A long term follow-up of the British infants mentioned a moment ago showed that the efficiency of maternal care is closely associated with the size of her family. These observations held for each social class, though the relationship was closest for the manual workers' families. The slide shows the striking relationship between large family size and less adequate maternal care[18].

What is the association between family size and illness? Representative of other findings linking the incidence of infectious diseases to family size are those of Dingle and his associates[19]. Their longitudinal, detailed family study of infectious diseases is a classic. As an example, it shows that infectious gastroenteritis rates (illness per family

year and illness per person year) increase directly with family size. The same investigators note similar relationships between the incidence of respiratory infectious diseases and family size.

Growth and development, not surprisingly, have also been related to family size. Data, again from Great Britain, indicate that children in large families are **smaller,** and that first born, with one or more siblings, do not achieve the height and weight attained by those who remain **only** children[20].

Finally, let us consider the relationship between family size and IQ, a complex and still unclear matter. A number of studies involving large samples of children were reviewed by Anastasi which strongly indicate that children from the largest families have the lowest IQ's[21]. One of the most significant studies done in Scotland found the usual associations between: (1) high-status occupation and high intelligence scores, (2) high-status occupation and small family size and (3) high IQ scores and small family size, but the most telling finding was that **within each occupational class,** the children from the **smaller** families had the higher IQ scores[22]. Altus, in a recent issue of SCIENCE, suggested that the first born and youngest children are likely to receive the most adult attention, and for the longest time[23]. He goes on to note that since the quality and quantity of adult contact may be the most influential factor in determining achievement-motivation and perhaps the ability, it follows that the more children a mother has, the less she can provide for any one of them.

A few findings linking chronic disease and family size provide another dimension to the discussion. Chen and Cobb[24] noted a direct relationship between rheumatoid arthritis and the number of **siblings** one has. They also reported that **parental** rheumatoid arthritis and peptic ulcer, among fathers, are associated with the number of **children** one has. We find a fascinating relationship between parity and the incidence of diabetes. There is a sharp rise as parity increases in the proportion of observed cases of diabetes over that expected[25]. Most of these women were over 28 at the time of onset.

The preceding kaleidoscopic review can be summarized in a few words. Increasing family size is associated with: (1) increased mortality among infants, (2) higher prematurity rates, (3) less adequate maternal care, (4) increasing incidence of infectious diseases in parents and children, (5) poorer growth—both height and weight among preschool and school children, (6) lower IQ scores among children, and (7) increased prevalence of selected diseases among parents.

These striking associations, along with the demographic, social, economic and other considerations mentioned at the outset, demand attention. North Carolina's concern goes back many years and it is worth reviewing where we have been and where we are going in this critical field.

Let me read you a part of a historical letter written to the local health directors of North Carolina in 1937 by Dr. George Cooper. He said, "There is not any argument about the necessity for attempting to prevent further births by the woman who has eight or ten children ard who is diseased and whose life would be in jeopardy by further child-bearing. The problem is to do something about it before that stage is reached. We are interested only in the medical indications upon which practically every physician would be in agreement, that is in trying to legitimately prevent further births among women who are bad risks, both for themselves

and their babies."[20]. Well, that statement, a first in public health for this nation, can stand unmodified 30 years later.

Undoubtedly, the intervening years have seen the introduction of more appropriate, acceptable and effective methods, but the earlier convictions of men like Dr. Cooper, Dr. Norton and Dr. Donnelly are now widely held. When Dr. Norton in 1938 reported on the North Carolina birth control program at an APHA Meeting, he noted that 56 clinics had been established in 50 counties. Dr. Donnelly, in reviewing Maternal Health Services in 1957, reported that 74 counties had birth control programs. This early groundwork was unique, since it is only within the past several years that a substantial number of other states decided to provide contraceptive services to those in medical need.

In 1960 Mecklenburg County mounted one of the first public programs offering the newly approved oral contraceptive. Other counties have followed suit. In 1963 at the state level North Carolina introduced the IUD as part of its participation in the National Cooperative IUD Study. Under the skillful, patient and dedicated guidance of Dr. Ann Huizenga, more than 70 counties are now offering this method. Only 4 counties have no contraceptive services. Dr. Ann's activities throughout the state are now being supplemented by the recent addition of two fulltime obstetrical consultants to the MCH Section. And of course Dr. Scurletis' and Dr. King's tireless leadership is apparent throughout the State as counties are helped to strengthen their total spectrum of maternal and child health services.

In summary, local health departments in North Carolina long ago saw the need for birth control services and provided what methods were **available** to the medically indigent. With the advent of the newer methods, and additional community awareness of the problem, more effective programs are developing.

The provision of contraceptive information and services, essential as they are, represents only one aspect of family planning. The less than optimal indices of family formation, family stability and family development mentioned in the early part of this paper present an even greater, more complex challenge. For some time the State Medical Society and State Board of Health have been concerned with these health related problems, recognizing that they are intimately intertwined with the quality of life itself. Early this year, as a result of their concern, and with the realization that medicine and health were only a piece of the whole, they sought guidance from the Carolina Population Center. A number of planning meetings were held involving members of the Medical Society, the State Board of Health, the Departments of Mental Health, Public Instruction, and Public Welfare, the Agricultural Extension, the North Carolina Family Life Council and representatives of religious denominations and a host of other groups and organizations. These meetings culminated in a proposal that a North Carolina Committee on Population and Family be established with the following major goals: To improve the cultural and genetic quality of the population of the State; to adjust the population to resources and to the rapidly changing technological and social environment; to strengthen the family and the home and to enrich family living; to develop new and productive approaches and to coordinate the activities of state agencies, professional societies and nonprofit voluntary associations interested in improving the

population and enriching family life in North Carolina.

Just recently the Governor announced the formation of the Committee with Mr. Marshall Rauch as its chairman. The structure and organization of the Committee will parallel that of the highly successful Governor's Council on Mental Retardation. The advisory board appointed by the Governor has representation from the official state agencies, appropriate voluntary groups and the public. A fulltime professional staff will be recruited to be followed by the creation of working, standing committees in the areas of health, education and welfare. This exciting development again places North Carolina in the forefront of those states acting to meet their family planning responsibilities.

Several other recent developments in North Carolina may be of interest. The action of the last legislature liberalizing our laws on abortion removes from the books ineffective and anti-social regulations. Permissible grounds for abortion **now** include: (1) grave impairment of the mother's health, (2) substantial risk of the birth of a child with severe physical or mental defects, or (3) pregnancies resulting from rape or incest. Concurrence in writing by three non-associated physicians is required to be filed with the hospital prior to the abortion. Also, there is a four-month residence clause in the law. Although we cannot claim to be first in this progressive move, only two other states have abolished the shameful restrictions which forced many women to seek dangerous, illegal help when their conditions were desperate and medical help was clearly indicated.

I know that you are eager to hear something about the Carolina Population Center. Because the hour is late, I will mention only several highlights of special interest to North Carolina. The Center is a University-wide effort involving over 80 faculty members in at least 17 different departments. It is under the brilliant and incredibly energetic leadership of Dr. Moye Freymann. Although teaching and research within the University are obvious responsibilities, there is a substantial commitment to assist in strengthening resources relating to population and family planning in the State. The spectrum of the Center's interest is wide. Included are studies and experiments intended to clarify some of the educational and organizational problems in developing effective family planning programs. Three different North Carolina counties, Caswell, Mecklenburg and Wake, are currently working in concert with University teams in developing and analyzing their family planning programs. Statistical studies of North Carolina's population growth, biomedical studies on reproduction, and research on social and psychological factors in human fertility are also being pursued. Family life education dealing with family sociology, marital relationships and sex education programs in the schools also bring the University in contact with local counties about the State. Members of the Radio, Television and Motion Pictures Department are preparing audio-visual materials for use in family planning programs. A Family Life Clinic, opened at Memorial Hospital last months, will offer in addition to contraception for for family size limitation and child spacing, premarital and marriage counseling. Couples with infertility problems will also be served. The clinic is intended as an educational resource, not only for medical, nursing, public health and social work students at the University, but for physicians and others from the State who wish to augment their knowledge and skills in these areas.

In conclusion, conceived narrowly or broadly, the health of individuals, families or society rests heavily on successful family planning. North Carolina is sensitive to the challenge and is responding. Let the response of health workers be vigorous, clear and in keeping with the health yields which so obviously can be derived.

Acknowledgement

I am grateful to Dr. Joe D. Wray for first bringing to my attention some of the data relating family size to maternal care, chronic disease and intelligence. Dr. Wray received his Master of Public Health degree from the University of North Caroilna in 1967 and is now with the Rockefeller Foundation in Bankok, Thailand.

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Help to Needy Grows Through Medicaid

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ALMOST EVERYONE HAS HEARD of and knows about "Medicare," Title 18 of the Social Security Act, which finances some of the health care of persons over 65. Lesser known is a companion piece to that legislation called "Medicaid," Title 19

of the Social Security Act, which is expected eventually to help finance health care for needy persons at all age levels in the 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam.

In many states Medicaid already has the potential of affecting more people than Medicare.

For example, New York City has already enrolled some 1.3 million Medicaid applicants and 2.5 million are eligible. Medicaid permits an individual state to set up a program, using its own money plus federal funds, to provide payment for the medical and health care of its citizens of any age who are "indigent." This has been interpreted to cover not only the extremely poor, but also those whose income is normally sufficient but who cannot afford to pay a large hospital or medical bill.

As of September 1, 1967, 37 states and Puerto Rico and the Virgin Islands had operating Medicaid programs.

In one sense, Medicaid is not new, but simply an evolutionary development from the public-assistance programs of federal-state financial assistance to the needy, aging, blind, and dependent children begun in 1935. (For that reason it may not be as large an added tax burden as it first appears.) In another sense, however, it is a new approach to care for the needy, and it is in the innovative features of the program that its potentialities—and problems—lie.

One innovation, sought by the medical profession for years, is uniformity of services. Under previous federally aided health-care programs, the needy were provided for separately, according to category, depending on whether their eligibility for aid resulted from age, blindness, permanent and total disability, or, in the case of children, from the absence or incapacity of a parent. As the programs were separate, so were the medical-care programs which developed in connection with them. A state might, for example, pay for a longer stay in the hospital for someone over 65 than for someone under 18. Under Medicaid, Title 19, the same benefits (with a few exceptions) must be made available to all those eligible for help.

Another innovation is a requirement that there be no absolute ceiling on eligibility. In the past, welfare programs have established fixed-dollar amounts for income and savings; applicants with income and savings above these levels were ineligible for aid. Under Title 19, those with higher incomes can obtain help when this excess income has been used up on health costs.

Medicaid is, in effect, an elaboration of the Kerr-Mills program for the aged, which the American Medical Association supported and helped implement. Kerr-Mills and Medicaid are in line with a philosophy the AMA has expounded since 1960.

Both have the two principal features which organized medicine believes are essential to sound government healthcare programs:

First, it helps those who need help.

Second, it is administered at the state level.

The AMA believes that a properly administered Title 19 program, with realistic criteria of eligibility designed for economically disadvantaged persons, plus the encouragement and availability of voluntary health insurance and prepayment plans for the solvent provide the best approach to health care. Together they could take care of all citizens without forcing taxpayers to pay for care for those who can well afford to provide their own care.

Physicians, and their professional association, the American Medical Association, have always believed in medical care for all, recognizing that the needy might not be able to pay for it. Care has always been given to those unable to pay.

The definition of "medically needy" is one of the factors which has both potential for good and for problems. A standard set too low would exclude some who need help, a standard set too high would authorize tax care for some who can well afford to pay their own way. At this writing, Congress was considering legislation which would set a top limit on state income standards for the medically needy at about one and one-third times the maximum welfare grant in the dependent-children program.

Currently New York State has established an income eligibility level of $6000 after taxes for a family of four. If Congressional action is taken on the above measure as proposed, this $6000 figure would be cut to about $3900. In California, the same size family would be eligible with an income of $3804 or less, and even there the program is being watched carefully.

New York State's year-old Medicaid program still appears snarled except in a few areas such as Monroe County (Rochester), where the program administrator has established a close working relationship with private physicians. In other areas there are complaints of delay in getting people into the program and on health-care service itself, which some recipients feel is slow or inadequate.

Another area which also holds problems as well as promise is that federal requirement which calls for "comprehensive care"—whatever the physician orders—to be provided for under Medicaid by 1975. While this is a goal long sought for the needy, it obviously creates financial problems for some state governments. Most states can truthfully claim that the needy can obtain almost any type of care they need now, but it has been through a melange of sources, programs, financing, and private

charity which has made the provision of such care extra difficult. By putting the financing of such care under a single program and a single agency, it has already, in some states (California, for example) become far easier for a physician to order for a needy patient the follow-through care his diagnosis indicates. In other states, however, where the welfare medical program has thus far been severely limited in services and financing, this 1975 prospect is a matter of concern.

Already Medicaid has demanded expanded services of some states; as of July 1967, all Medicaid programs had to provide at least some inpaient and outpatient hospital services, physician's services, nursing-home care, x-ray, and other laboratory services. (Current legislative proposals would permit the state to choose any seven of 14 services listed in the Medicaid law.) In states which heretofore paid only for hospital care, this has already brought a major expansion in both care and in costs.

California is already providing comprehensive care for the needy and an only slightly smaller list of services for the medically needy. And another change in care patterns has also taken place there. Most of the Medicaid program in that state is administered through private health insurers, acting as agents of the state. This, too, is a system long recommended by the medical profession, in that it brings the poor fully into the mainstream of American medical care; they can choose their physician and their hospital, and present as a guarantee of payment their identification with an insurance plan, rather than a welfare agency.

The AMA did not support enactment of Medicare, Title 18, first because it provides government-financed care for both the needy and those able to pay for it and also for a host of other reasons including cost and extensiveness of government controls. But by recent convention action, the AMA reaffirmed its support of Title 19, Medicaid. The AMA House of Delegates recommended that "to improve the delivery of health-care services to the needy of the nation" the medical profession take a strong stand in support of implementation of Title 19 at the state and local level, while still seeking such changes as will improve the program. It urged "organized medicine to take a leading role in formulating and directing Title 19 programs at the state and local level, with a view to bringing within a single format much of the needed improvement in personal health services to the needy of the community."

At the same time that the AMA reaffirmed its support of the Medicaid program, its House of Delegates initiated a study to develop "guidelines" for relations between government medical-care plans and the local community.

One guideline proposed that "the responsibility for the health needs of a community basically resides at the community level, and all the local resources of the area—private, voluntary,

and public health—shall be examined before the community accepts government monies."

Dr. Milford O. Rouse, president of the American Medical Association, recently stated that the AMA and the state and county medical societies, together, should launch a continuing and workable program to improve existing health-care services for all persons of the nation. As a corollary, he said, the program should be aimed not only at the improvement of existing health care, but at the establishment of new services where they are needed and are not now available due to geographical, ethnic, or financial reasons.

"Rather than continuing to work at shoring up the dividing walls between what we call the private and public sectors of medicine . . . we must undertake to devise health programs ourselves, making them work under predominantly, if not entirely, private auspices," he added.

Most physicians feel that in most cases Medicaid, as set up now, working through individual doctors in private practice, can provide adequate health care even in slum areas.

The American Medical Association and most physicians feel that a patchwork of care provided by countless different arrangements and systems is not only inefficient but will not insure the quality care for all so important to the nation's health.

In a demonstration project of Medicaid being carried out in Florida, one of the important points considered in establishing the demonstration was quality control of the medical practices, by doctors overseeing the work of their fellow physicians.

This particular project dovetails Medicare with Medicaid so that persons over 65 who would normally be receiving welfare assistance in the state find it possible to go right into the Medicare program at no cost. The Medicaid program, Title 19, pays the deductible charge required by Medicare for hospitalization. Medicaid also pays the $20 deductible charge required by Medicare for outpatient diagnostic studies, and pays for all prescribed drugs.

The Florida project was developed under a governor's committee headed by Dr. H. Phillip Hampton, who also is a member of the AMA's Council on Legislative Activities and the Committee on Welfare Services. The project was developed through the cooperative efforts of the Florida Medical Association and the Florida State Department of Public Welfare.

Over-all responsibility for health and medical care remains with the medical profession. The problems are many. The solutions, because of the complexity of our society, are complex and difficult, but the medcial profession stands squarely behind quality medical care for all our citizens and it seeks efficiency in providing it.

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Resolution by N. C. Public Health Association Disavows Use of Term "Sub-Professional"

WHEREAS renewed emphasis is being placed on the enlistment of health personnel to assist doctors, nurses and others and to assume some health duties under the direction of this professional health personnel and

WHEREAS there is the temptation of some to refere to these persons who assist doctors and nurses as "sub-professionals" because they may not have the degree of M.D. or R.N. or other similar professional health degrees and

WHEREAS this designation could very well apply to a lawyer or a certified public accountant or a minister as well as to a person who has no professional degree when such person engages in health work, and

WHEREAS, the designation "sub-professional" is a designation which has uncomplimentary implications and discourages persons with normal pride from becoming interested in assisting professional health personnel

THEREFORE, BE IT RESOLVED that the North Carolina Public Health Association does hereby disavow the use of the term "sub-professional" as it relates to this helping personnel and recommends to all members of the Association that they use other more complimentary terms in referring to this personnel—such terms as "Aides," "Technical Assistants," "non-professionals," or such other terms as may be more appropriate for the particular professional for which this person serves.

Resolution adopted in 1967 NCPHA Annual Meeting.